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# EMPIRE STATE ARCHITECT

JULY / AUGUST 1944

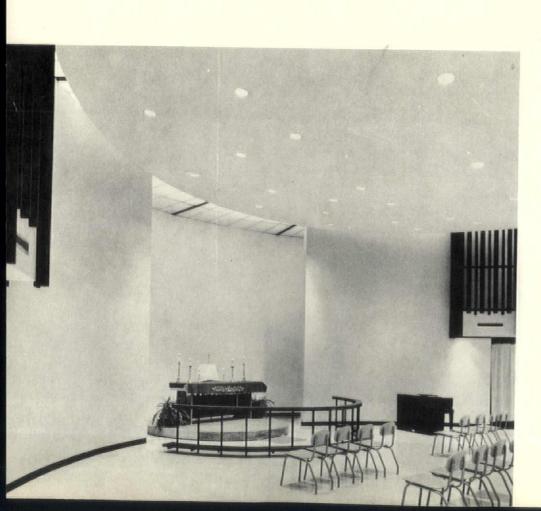
VOL. XXVI No.

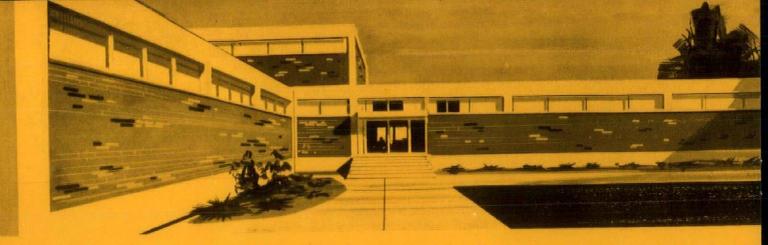
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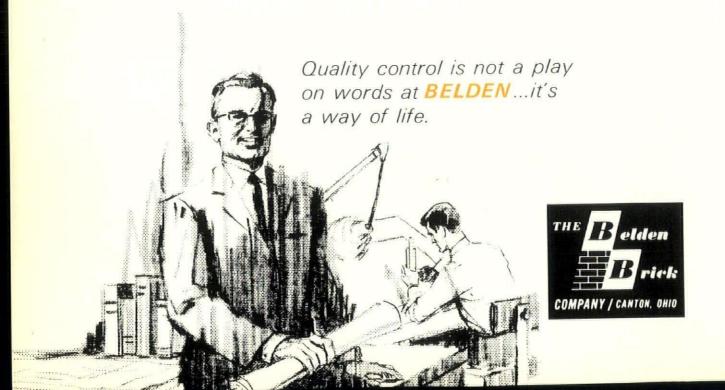
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# EMPIRE STATE ARCHITECT

OFFICIAL PUBLICATION OF
THE NEW YORK STATE ASSOCIATION OF ARCHITECTS
State Organization of the American Institute of Architects

JULY/AUGUST, 1966

VOL. XXVI, No. 4

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#### EDITORIAL

#### LIMITLESS LIABILITY IN NEW YORK STATE

A recent article in the Wall Street Journal reprinted in the May/June issue of the Empire State Architect on the subject of injury claims against engineers and architects, reports the unusual increase in number of such suits as a "five billion dollar injury industry . . . part of our national quest for the free buck", and that the lack of an adequate statute limitations encourages "third party liability suits" causing builders and designers legal costs to rise, requiring them to purchase broader liability insurance to cover possible suits over defective workmanship; and that mounting claims under this type of insurance are leading to higher premium rates, which has tripled in the past three years. It also points out "that in faulty workmanship cases many courts are holding that the limitation period in the statutes do not begin until the defect is discovered - an interpretation that is almost indefinite liability." Eventually these costs are passed on to the owners, increasing construction cost unnecessarily.

New York State shares with only twelve other states the dubious distinction of being without a Statute of Limitations for the design professions.

Yet, this pressing need of a Statute of Limitations for the design professions in New York State has once again been cast aside by Governor Nelson A. Rockefeller's veto. His decision was based chiefly on a memorandum from the Bar Association of New York City who object to any restrictive period of limitation and prefer that "All such actions" (for property damage or personal injury based on alleged design defects) "accure at the time the injury occurs, but not at the time the force that causes the injury is to be put in motion."

This means that current statutory limitations of liability take effect when an injury occurs, whether that is ten or forty or any number of years after the alleged cause for such injury has been established. For architects and engineers this means that a cause for action may be taken at any time after a building has been completed and in use, even forever! That there is no logic or reasonableness for this point of view – even for lawyers – is substantiated by the fact that the vetoed bill was passed unanimously by the Senate – which is comprised of 47 lawyers out of a total of 65 senators; and passed by the Assembly with only three negative votes out of the Assembly total of 165, which contains 99 lawyers.

The Bar Association also argues "that if the architect's design were faulty and the building collapsed as a result thereof more than six years after the design was completed, all actions would be barred before liability arose." This seems to be the point they fail to grasp. Failure due to faulty design — when it occurs — takes place before or as soon as the designed load is imposed; and if it does not occur within a period of several years it never will occur.

"Failure of structure" of itself is hardly in the majority of such claims. Actions are instituted for alleged improper: substitutions of materials, approval of shop drawings and schedules, supervision of construction, estimates of construction cost, determination of soil structure, examination of sites, issuance of certificates of payment, interpretation of tests, (or anything else they can think of), to name a few, all of which are actually determinable during construction. Surely it is unfair that such claims should be allowed forever; and seven years plus three years as provided in the vetoed bill is more than adequate protection to the public.

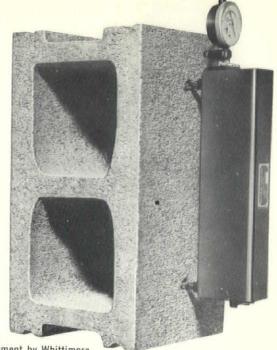
The vetoed Statute of Limitations bill supported by the design professions provided a period of seven years in which an action may be started, and requires such action to be taken within three years after the date an injury has occured that takes place in that seven year period. Thus an injury occuring in the seventh year allows a litigant an additional three years in which to commence action.

The whole kernel in the nut is that the present limitations statutes apply to general liability for injury and property damage and not specifically for building structures. The result has been that unscrupulous persons have initiated ill founded and unwarranted actions — expensive to defend — to take advantage of professional liability insurance now universally carried by architects and engineers. In turn, this has caused the cost of such insurance to rise to astronomical and unreasonable figures.

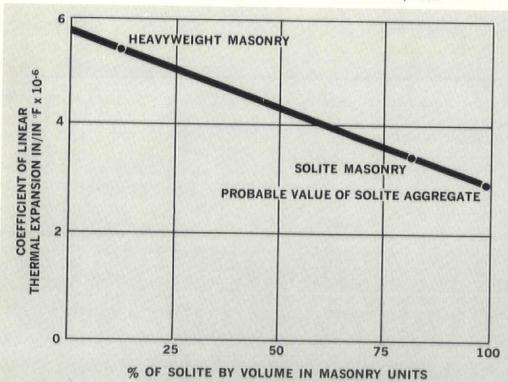
The kindest thing that can be said about this deplorable action is that the governor and the Bar Association are laboring under a cloud of misapprehension concerning this problem and the need for its solution; and it certainly would be as wise as it is essential for the Governor to call a special conference on this subject so that all interested persons can exchange their views and resolve their differences.

The need for such a statute is clear and obvious; to continue to be without it perpetuates a lack of justice and equity that is a significant void in our proud jurisprudence.

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# NEW YORK STATE ASSOCIATION OF ARCHITECTS 1966 ANNUAL CONVENTION

October 5 to 9

#### Whiteface Inn Lake Placid, New York

#### ADVANCE PROGRAM

WEDNESDAY OCTOBER 5 Arrival at Whiteface Inn before or after dinner (No events scheduled)

THURSDAY OCTOBER 6

A.M. 9:30-12:00-General Registration

10:00-12:00-Opening Session, Annual Meeting

Noon 12:00-Ladies Luncheon, including Cocktails and Fashion Show, in the Dining Room

P.M. 12:30- 2:00—Opening of Exhibits with Exhibitors' Cocktail Party and Buffet Luncheon for Architects and Male Guests

2:00- 5:00-Continuation of Annual Meeting

2:30- 5:30—Registration (Delegate Registration closes at 5:30 P.M.)

6:30-Host Chapter Cocktail Party, Exhibit Areas

7:30-Dinner Honoring Past Presidents

Evening Activities Dancing in Colony Room; TV in Game Room; Cards in Adirondack Lodge

FRIDAY Recreation Day—Side trips, touring, OCTOBER 7 golf, shopping, etc.

A.M. 9:00—Tee-off Time — First Annual Architects vs. Exhibitors Golf Match

10.00-Polls Open for Election of Officers (Voting by Delegates)

P.M. 1:00-Luncheon - No Formal Program

3:00- 5:00-Seminar

5:30-Polls Close for Election of Officers

6:30-Cocktail Party in Exhibit Areas Host, Whiteface Inn

7:30-Awards Dinner

9:30—Party Night — Arranged by Host Chapter SATURDAY OCTOBER 8

A.M. 8:30-Chapter Presidents' "Hangover Breakfast"

10:00-12:00-Final Session, Annual Meeting

P.M. 1:00-Luncheon - Drawing for Prizes (Winners must be present)

3:00-Afternoon of Recreation

3:30-NYSAA DIRECTORS' MEETING

6:00-Cocktails - on your own

7:30—Annual Banquet (Black Tie Preferred) Formal Installation of New Officers, Main Guest Speaker

10:00-Dancing, TV, Games

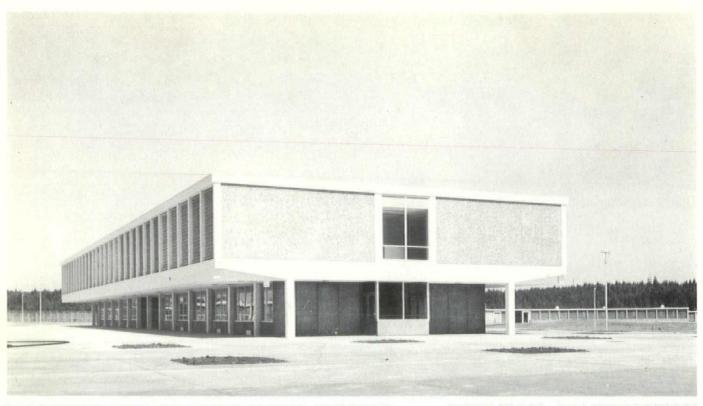
SUNDAY Departure after breakfast OCTOBER 9

Westchester Chapter, AIA
Host Chapter
Robert W. Crozier, President
P. Compton Miller, Chairman

#### TO ALL MEMBERS:

Kindly note that the program format has been changed considerably from previous conventions in many respects. We trust that this advance information will encourage a large attendance at the convention which, we can assure you, should prove tremendously stimulating and rewarding. Remember the dates are — October 5 to 9, 1966, at Whiteface Inn on Lake Placid, New York. Kindly make your reservations as soon as possible.

Gerson T. Hirsch, Chairman Convention Committee Westchester Chapter, AIA



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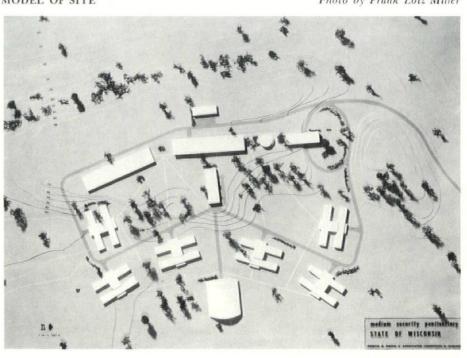
MODEL OF SITE

Photo by Frank Lotz Miller

#### WISCONSIN CORRECTIONAL INSTITUTION

Fox Lake Wisconsin

Curtis and Davis
Architects



# CORRECTIONAL BUILDINGS OF TODAY

Curtis and Davis Architects

Crime rates are going up in many categories, and the average age of inmates in county jails is going down, increasing the disciplinary problem. There are more prisoners, filling more jails and jailyards, moving along ramps and corridors, arriving and departing by police van and squad car from trials, hearings and precinct stations.

This problem is a by-product of the population explosion. The countryside is becoming crowded, and so are many of America's county jails.

One result is increasing contact and conflict between neighbors and passersby in these new and developing areas, and the restless and troubled men who stand inside the jail windows, looking out on the world and sometimes loudly denouncing it.

Neighbors working in their gardens, parking their cars, walking home from train and bus stops, or sitting out on summer nights when the nearby jail windows are open, experience incidents which stir their complaints.

Frequently, therefore, when prisoner overcrowding requires a new building program and an expansion of the jail, there is friction between the institution and the surrounding neighborhood.

An example of a solution to one such problem is the maximum security wing addition to the Nassau County Jail in East Meadow, New York.

Nassau County tripled its population between 1940 and 1960. There has been much recent growth, and continued expansion of neighborhoods. Yet only one generation ago the county had many rural aspects. One of the present jailers grew up among farm animals, which his father, "originally a cowman from upstate," had been brought in to develop on the Nassau prison farm. The present jail site faces cultivated fields on the jail's 60 acre tract where prisoners still work farm crops in the growing season. But fast

encroaching on this once-rustic setting are neighborhoods to the east, other residential areas to the west. The residential section especially had become the source of complaints about noise from the jail.

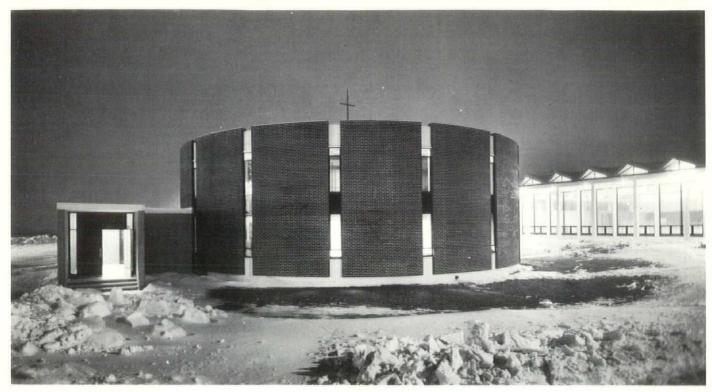
Since the noise was unavoidable in a windowed building, especially in hot summer months, it was decided that the answer was to install air-conditioning in the new wing and to re-design the window system. Security was the basic consideration to this new approach. Windows connecting directly to cells are a standing invitation to a prisoner to attempt escape. Like others of its type, the Nassau County jail has been the scene of escape attempts. With this background, plans were developed for a four-story reinforced concrete frame cell block, connecting at basement level with the jail's existing maintenance, kitchen and other communal facilities. The new wing on its long side faced north, toward the remaining farm fields, with maximum distance to east and west from the residential neighborhoods. This placement also put the new structure on the far side of the old jail from nearby Meadowbrook Hospital a 670-bed general hospital. Inside the new wing, the cell rows were separated from the outside walls and windows by a double corridor, one for prisoners, and one for guards, with the guards' corridor making a complete circuit of the central cell-rows. The prisoner's view from his cell or walkway area is through clear glass to open sky. The cheering effect of clear light is thus provided (no stippled or obscured glass is used, as in many of the older jails), but the inmate's line of vision and contact is above the outside streets and residences. The neighbors see nothing when looking up at the narrow prison windows, and they hear nothing. The window is a continuous strip of fixed tinted glass. Built into the walls above this slit, for use at night or overcast days, is a continuous panel of lights, which are beamed at the ceiling. The light is reflected as diffused illumination, and all fixtures are out of reach of the inmates.

The exterior wall, consists of channel-shaped precast concrete sections side-by-side, to serve both as containing walls and as huge ducts for circulation of tempered air. This design made possible a wall construction costing one third less than that of the older and more conventional building. Styro-foam insulation is used in the walls and in the roof.

In a recent survey of contemporary prison architecture the New York Times commented:

"Huge stone walls have given way to fences, buildings are being constructed in clusters instead of barracks arrangements. Chapels have begun to resemble modern churches. The building housing the library, school, and crafts activities as Washington State Corrections Center would be considered an asset to almost any campus."

The Chapel at Wisconsin Correctional Institution, the Educational Building at the Washington Corrections Center, and the Nassau County Jail, are noteworthy for this new approach to correctional building design.



CHAPEL EXTERIOR

Photo by Frank Lotz Miller

# WISCONSIN CORRECTIONAL INSTITUTION Fox Lake Wisconsin

Curtis and Davis • Architects

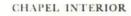
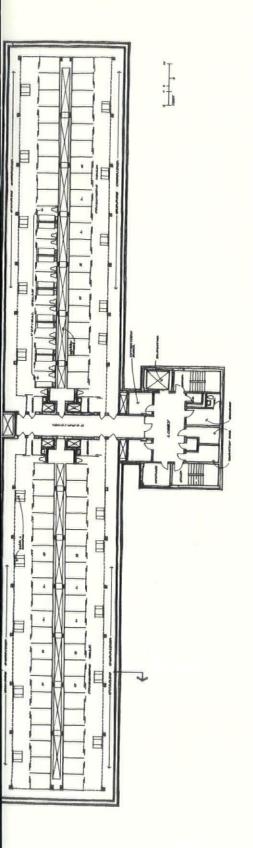


Photo by Frank Lotz Miller





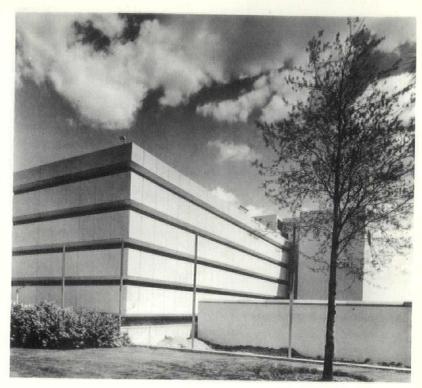


Photo by Bill Rothschild

## ADDITION TO NASSAU COUNTY JAIL

East Meadow

New York

Curtis and Davis • Architects

Brown & Pomerantz • Mechanical Engineers

Fraoli, Blum, Yesselman

Structural Engineers

A. J. Martone & Sons

General Contractors

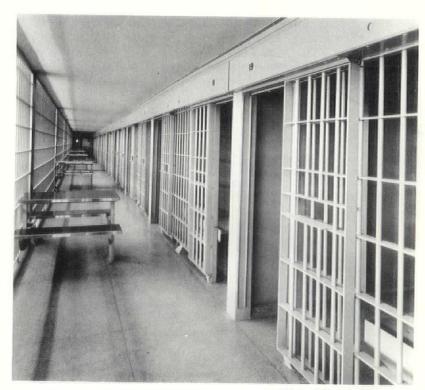
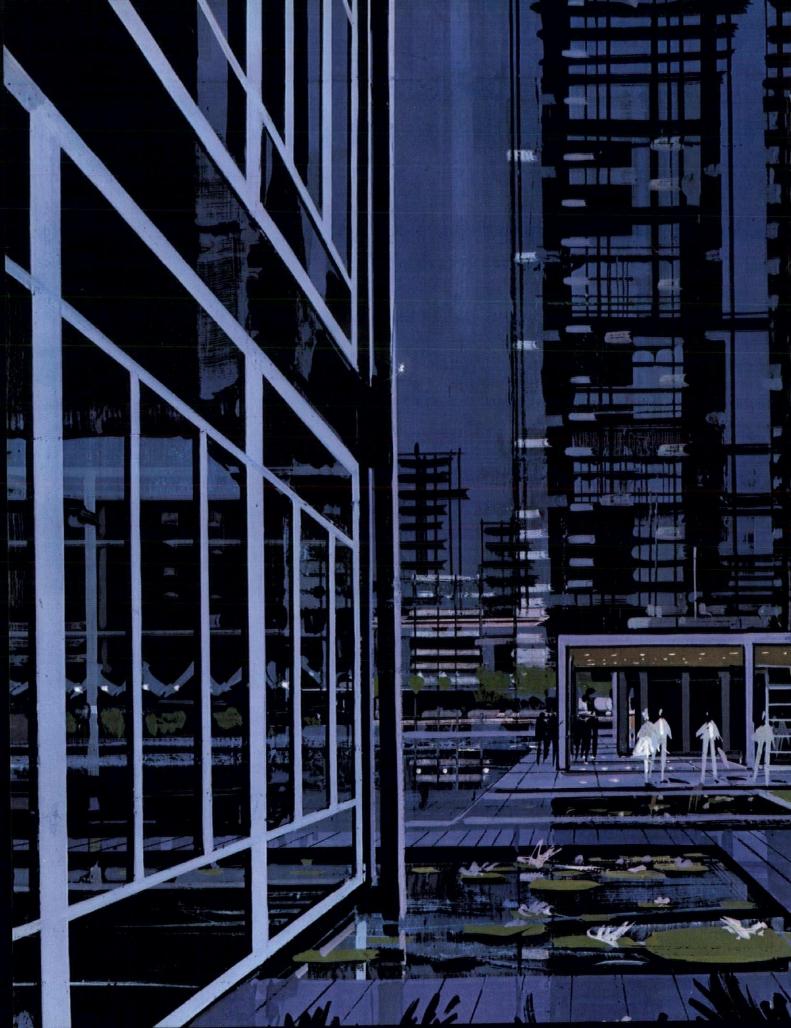


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# CORRECTIONAL INSTITUTIONS: SECURITY and REHABILITATION

Hellmuth, Obata and Kassabaum, Inc. Gyo Obata, Principal in Charge of Design J. Tom Bear and Daniel B. Gale, Program Supervision

Hellmuth, Obata and Kassabaum, Inc., has assumed a prominent role in contemporary correctional design as architect of major penitentiaries for the governments of the United States and Canada. The firm has completed a full-scale correctional Master Plan for the Commonwealth of Puerto Rico and is currently working on an Adult Correctional Training Institution for the State of Hawaii in association with Honolulu architects Brown and Hara. Commissioned as architect for the Federal Maximum Security Penitentiary at Marion, Illinois, the first facility of its type to be built in 20 years when it was completed in 1962, they have also been retained by the government of Canada as master architectural consultants for a new system of correctional institutions.

#### Marion Correctional Institution

At Marion, Illinois, federal administrators wanted maximum security in a structure which would stress rehabilitation for inmates. Traditional prison arrangements were reviewed and rejected in favor of a new "pinwheel" plan. Corridors are set at right angles to each other, but they are not on a direct line and do not meet exactly. At the junction of the corridors, officers are stationed inside a security glass enclosure where they can maintain visual and mechanical controls over the corridors. Entrance to the enclosure itself is possible only through a small sallyport. Grills secure passage to and from the corridors and are controlled electronically from the enclosure. Entries to the corridors are also monitored by small, unobtrusively placed closed-circuit television cameras.

One corridor leads to cells and the library. Another goes to special handling facilities (including admission, hospital and maximum custody) and a third to the chapel, dining hall and service facilities such as the kitchen, laundry and maintenance elements. The fourth corridor leads to the administration area. This passage has a number of grills which are controlled by an officer stationed past the central control point. Thus, in the unlikely occurrence that the inside control station would be taken over by inmates, they would still be unable to get outside. The institution is surrounded by double fences with guard towers at each corner and center to provide unbroken visual control of the security perimeter. A conscious effort was made to design the towers and fence in an attractive manner so that these controls would look not unlike fences surrounding factories.

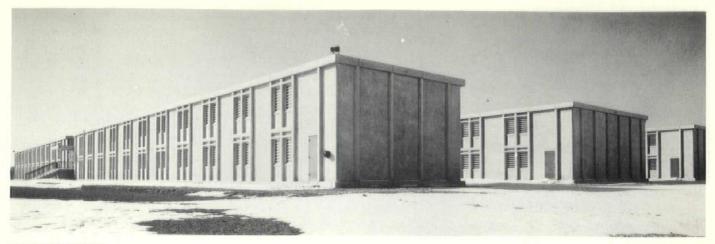
The administration building, at the front end of the main corridor, is constructed of reinforced concrete with glass walls to make it as much like a normal office building as possible. Cell housing units open off the corridors. Maximum security cells are backed by a utility corridor on one side and the regular corridor on the other. Normal cells have an outside exposure, again opening onto the corridor. The third housing type is a dormitory system for 15 or 16 men per unit. Windows are jalousie type with concealed mullions of tool resisting steel which cannot be sawed through with ordinary tools. The inmate is afforded a good view between the mullions, but there is not enough room for even a small man to break free. The prison provides units for education, food service, worship, reading and gymnasium activities. The design of these facilities was made as pleasant as possible, consistent with budgetary limitations and security requirements. The chapel, for example, is a separate circular building, standing in an interior courtyard, surrounded by a small pool. The criteria for design was to provide an atmosphere which would offer more than the traditional "escape-proof" prison. Pleasant living quarters, training facilities and recreational areas were designed to encourage inmates to rehabilitate themselves.

Mr. C. V. Richardson, warden of the institution evaluating the effectiveness of the penitentiary after several years of use, recently said, "while it is indeed difficult to measure the effect of such things as the centrally located chapel, plainly visible from the inmate dining room, this and such things as the jalousietype security sash in the corridors (replacing the traditional barred windows) help create an atmosphere of openness, lightness and spaciousness not found in traditional (penitentiary) architecture. We are convinced that the many departures from traditional penal architecture contribute to the receptiveness of the men confined to the programs offered", and that "the design of the institution admirably contributes to the concept of maximum custody with concurrent maximum program paricipation by the men confined".

The walls of every structure but the administration building are made of precast, reinforced concrete with an inner layer of insulating material, brought to the site and erected as structural elements of the buildings. The use of precast concrete walls permitted extra attention to quality control, so important for security purposes. The chapel has vertical segments of chunks of colored glass cast in epoxy between its precast panels. Light is admitted through these glass sections and through a skylight.

#### Canadian Penitentiary Service System

As master architectural consultants to the Canadian correctional authoritties, the firm has developed proto-types for a new series of medium and maximum security institutions throughout the nation. The first completed institution is located at Cowansville, Quebec. Four others are being built in various parts of Canada. Canadian firms have been retained for site adaptation of the proto-type institutions and for supervision of construction. The master document can be used everywhere such institutions are needed. The medium security proto-type provides for about 400-450 inmates, considered a good managable number. If and when there is a need for more room, more



HOUSING UNITS

institutions, built from architectural proto-type documents can be erected in the same immediate area. When this stage is reached, each of the penitentiaries becomes a satellite connecting to a central administration building. Thus, upwards of 1,200 inmates can be housed in a single complex. The main administrative unit is located outside the security perimeters of the satellite institutions. The unit maintains quarters for the warden and staff, water supply, maintenance, heating, sewage disposal and central stores. Entry through the security perimeter is through a guard house and sallyport. A passageway leads to the administration center for the satellite. This center can function for full administration as long as only one institution exists on a site. Once additional institutions are built and the central administration is removed outside the perimeter, this area still functions as a sub-administration element. Within the perimeter, the architects designed a "five centers concept". This type of planning provides

facilities for living, special handling, industrial and vocational training, a community center and the administration center. The community center includes the dining hall, an auditorium, library and chapel. This center is designed around a mall which faces away from the rest of the institution. It creates a changes of atmosphere for inmates. The administration center includes a visiting area and interview rooms. Special handling elements include prisoner processing, health facilities and a detention section for discipline. The living quarters are in four "X" shaped buildings, grouped around a recreation yard. The buildings are built primarily with precast concrete with some poured-in-place concrete. Precast construction was particularly appropriate because of the short duration of the prime construction season. The concrete is very dense and there is use of shockbeton for extra strength. The grills are concrete and built in front of the windows for security.



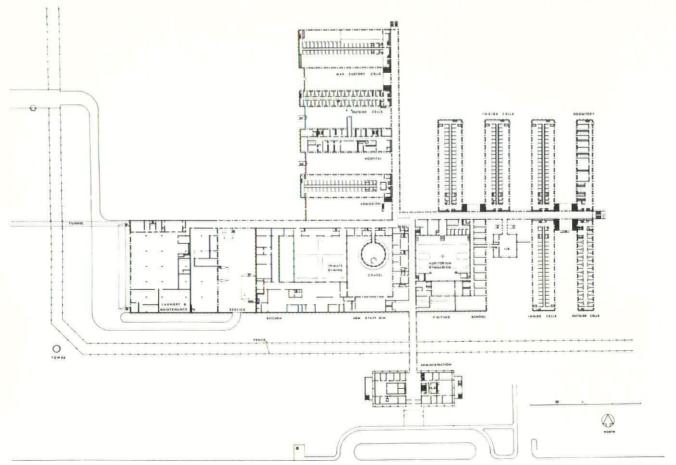
DINING HALL



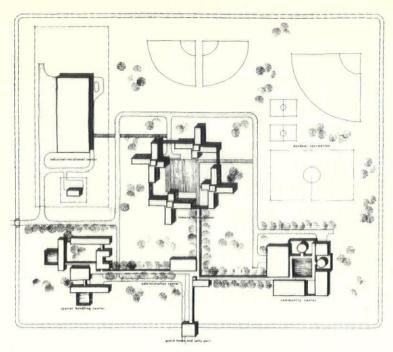
CHAPEL

Photo - Harr, Hedrich-Blessing

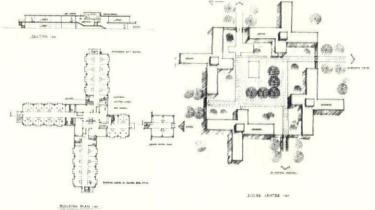
#### FEDERAL MAXIMUM SECURITY PENITENTIARY - MARION, ILLINOIS



PLAN



SITE PLAN

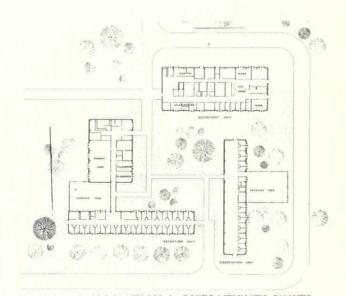


CANADIAN **MAXIMUM** SECURITY **PRISON** 

Hellmuth Obata and Kassabaum, Inc. Architects



COMMUNITY CENTER



RECEPTION, DISSOCIATION & OUTPATIENTS UNITS

EMPIRE STATE ARCHITECT - JULY-AUGUST, 1966 / 15

#### news and views

# Architects and Engineers E & O

(Reprinted from "The Bulletin" published by Bronx Chapter AIA)

#### Part I

There has been a constant rise in premium levels both here and abroad for architects and engineers professional indemnity insurance. It has been about 10 years since the Continental Casualty Company entered the field very strongly. They have had substantial underwriting losses. Actually, it takes a very long time for experience to mature. The development of big claims is slow with many surprises in reserves as the years go by.

Loss ratios have led to restrictions in coverage along with price increases. There have only been a few domestic companies other than Continental Casualty, such as Citizens Casualty and The Travelers, that have entered this class. It is very important that the producer compare the actual coverage provided in making recommendations to a client. In Part Two we shall make a comparison of some 24 points with respect to Lloyd's, Continental Casualty, Citizens Casualty. If you do have another domestic carrier in your office writing the class, it would be wise to go through the policy contract and post the answers to the 24 items for comparison purposes.

If you are going to spend a very large sum of money for coverage each year, you should make certain that the coverage protects the insured in exactly the way he wants it and that there are no serious gaps in the coverage provided.

#### Loss Record

Architects and engineers are quite conscious of their own exposure to loss. They have had constant advice from their own attorneys in recent years and in their own associations they do hear panel discussions which point out what has happened to members of the profession.

They have such a wide scope of activity-preparing plans, drawing designs, selecting and recommending materials to be used, supervising the work itself in accordance with the plans and specifications, devising procedures and methods of construction. The end product can be so varied: a simple office building, a bridge, tunnel, dam, aqueduct, large manufacturing plants, public utilities, chemical processes, highly automated electronic devices-the foundations, the structures, the machinery itself. Like the attorney, the architect or engineer is accountable for all the work of his career.

The courts in recent years have almost made the architect and engineer a guarantor of the efficiency of designs, plans, projects.

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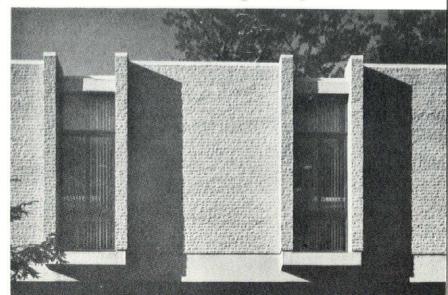
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As in other parts of the law, there was a time when privity of contract had to be shown but today that is all gone and suits are wide open. The contractor can always bring the architect in as a third party defendant if he is sued. If the employee of an independent contractor sues a general contractor for personal injury in a collapse, he can sue the architect. It goes back to the tendency to consider the professional man as a special type of overseer for the works. Counterclaims arise when architects try to collect for their fees. (In a future issue, we will take up some examples of mistakes or alleged mistakes.)

#### Rice Stadium Study Authorized

Rice University, Houston Texas announced in May that it had received an unrestricted grant of \$25,000 to finance a feasibility study of a cover for the 70,000 seat Rice Stadium.

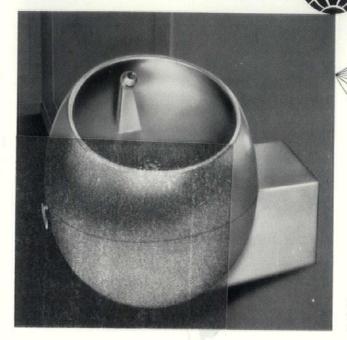
If the study proves the architectural, engineering and financial soundness of a cover, Rice officials would construct the world's first roof over a full sized stadium designed for football.

The study will be directed by the architectural firms of Lloyd, Morgan & Jones and the McGinty Partnership, the firms headed by Rice architectural graduates who first designed the award winning Rice stadium in 1950.

To assist in the study the architects have appointed Brown & Root as project engineers, Walter Moore & Associates, structural engineers. Brown & Root engineers were constructors of the stadium, considered by coaches, fans and sports casters to be one of the finest football

(continued on next page)

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#### **NEWS AND VIEWS (Continued)**

facilities in the United States today. The basic aerodynamic studies of storm loadings and stress analysis will be conducted by members of the Rice civil and mechanical engineering departments, many of whom were consultants on the spectacular Harris County Domed Stadium.

Among the several designs to be considered by the feasibility study group is the concept which a young Rice architectural graduate has been working on for a number of years, a gigantic flying cover suspended on cables between two counter balanced eliptical structural steel arches. The cover, as conceived by 31 year-old John Mc-Ginty when he was an undergraduate sitting in the stadium designed in part by his father, the senior member of the firm which will test now his ideas, is to provide a cover which may be rolled over the stadium only in inclement weather. The sun-rain shade, resembling a huge tent fly suspended over the stands and playing field, would be open on all sides to permit natural ventilation and since it would either be transparent or removable it would allow sunlight to sustain the growth of grass on the playing field.

Hermon Lloyd, F.A.I.A., a senior partner in his firm, was born in Houston in 1909, received a B.A. and B.S. in Architecture from Rice in 1931 and began practice in 1935.

Another "evaluator" in the project is Milton B. McGinty, F.A.I.A., a respected architect of more than 30 years experience in major building design and engineering supervision. McGinty, a former instructor in architecture at Rice, is a past president of the Texas Society of Architects, Houston Chapter of the American Institute of Archiects; past member of the Texas Board of Architectural Examiners; and past member and Vice-Chairman, Planning Commission of the City of Houston.

The stadium which is being considered for a "revolutionary new rain hat" is one of the finest in the United States for football. It has a seating capacity officially of 70,000, but can be expanded as much as 3,000 by bleachers on the concourse. Every effort was made in design and construction to give fans a fine view of the playing field and benefit of many conveniences.

Built strictly for football, the first row of seats are only 35 feet from the sidelines. The lower stands form a complete bowl seating 40,000, with the incline at a concave angle to provide the best direct line of vision. The upper decks seat 15,000 each on the east and west sides.

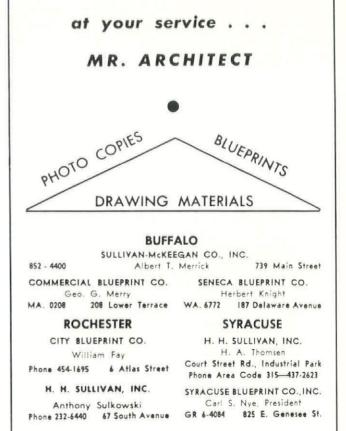
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#### CASE HISTORIES OF PROFESSIONAL LIABILITY CLAIMS

This information on professional liabilities is offered with the suggestion that architects review their practices and procedures.

Care in Estimating Costs

A firm of architects was employed by a college to design an administration building which was to be paid for out of a \$500,000.00 bequest with no additional funds available. The agreement between the owner and the architect provided that information regarding cost should be submitted to the owner as follows:

- (a) In Schematic Design Phase A statement of probable construction cost based on current area, volume or other unit costs.
- (b) In Design Development Phase A further statement of the probable project construction cost and, if authorized by the owner, obtain a semi-detailed estimate of such cost.

After the plans and specifications had been completed, bids were taken. The lowest bid was \$630,000.00. The college, being unable to proceed with the project, advised the architects that the work they performed was of no value and refused to pay further for the services rendered. In fact, the college threatened to sue to recover payments already made, claiming that the architects had undertaken to design a building that could be constructed within the funds available to the college. The dispute was finally resolved when the architects agreed, without extra compensation, to redesign the structure so that it could be completed within the college's budget.

MORAL—Whenever cost is a matter of prime importance to the owner, the services of professional estimators should be used. There should be a clear understanding with the owner, in the beginning, and the architect should not, in fact, act as a "professional estimator". If statements of probable construction costs are prepared, the owner should be kept informed of any significant changes that develop during the design process.

The American Institute of Architects Committee on Professional Insurance:

Counselor on Professional Insurance Victor O. Schinnerer

Contractor's Unpaid Material Bills
Charged to Architect



After completing construction of a small commercial building, the general contractor persuaded the architect to issue a certificate of completion. Relying in part on the contractor's assurances that all bills had been paid and making only a cursory check himself, the architect did issue a certificate of completion. A short time later, an unpaid material supplier filed a lien for \$4,000.00. Meanwhile, the general contractor had gone bankrupt and his bonding company was forced to pay these bills. The bonding company then entered claim against the architect, alleging that the architect should not have issued a certificate of completion without making complete verification as to payment of subcontractors and material bills. The bonding company's claim was upheld and the architect was called upon to pay this loss.

MORAL—Before issuing a certificate of completion, require adequate proof that all subcontractors, labor and materials have been paid. Insist upon receipts and releases in proper form.

EMPIRE STATE ARCHITECT - JULY-AUGUST, 1966 / 19

#### Legislative Report No. 10-June 17, 1966 STATUTE BILLS VETOED BY GOVERNOR

We regret to inform our membership that Governor Rockefeller this week vetoed our statuute of limitations bill, A.I. 5427, Pr. 5425, as well as the Greenberg bill, S.I. 3377, Pr. 3519.

To say that we are disappointed is to put it mildly, and we shall not use asbestos paper. We have spent 9 months on this legislation only to wind up with a feeling of frustration. Why did the Governor disapprove? Chiefly because he relied heavily on a memorandum submitted by the Bar Association of the City of New York (we talked to them before memo was written). The Bar Association objects to any restrictive period of limitation and prefers that "all such actions" (for property damage or personal injury based on alleged design defects) "accrue at the time the injury occurs, but not at the time the force that causes the injury is to be put in motion."

In other words, if an injury does not occur until 10, 20, 30 or 40 years or more after building or project is completed and in use and the architect may have long retired or passed away, then the statute begins to run. Hogwash and unadulterated baloney. In our opinion, this logic is so unrealistic as to render unnecessary any statute of limitations for the design professions. Who needs a statute when there is no specific limitation period?

The Legislature apparently disagreed with this odd viewpoint, since the passage of our bill was unanimous in the Senate where there are 47 lawyers out of a total of 65, with only 3 negative votes cast in the Assembly out of a total of 165 including 99 attorneys. This practically unanimous vote in both houses, however, failed to impress the Governor who has applied two successive vetoes in 2 years.

What is our next step? Your Association is still determined to continue the fight regardless of road blocks thrown in the path of achieving a just and equitable law for architects and engineers, such as exists for other professions. President Whiteside is now preparing a letter to the Governor conveying not only our deep disappointment over the disapproval of the legislation but also requesting him to call a conference as soon as possible of all interested groups in an attempt to achieve a basis of agreement of a statute of limitations that will meet with his ultimate approval.

We have done our best, sorry we do not have happier news. We want to thank all who cooperated with letters and telegrams. There is other important legislation with which we are concerned and you will be kept posted as progress occurs, or the final curtain falls (whenever that may be) on the 1966 session.

F. A. EVANS, JR., Chairman Legislative Committee H. I. FELDMAN, Co-Chairman

#### NYSAA NOTICE

At a meeting of the Board of Directors held on April 30, 1966, the following motion was unanimously adopted:

"It was moved and seconded that the Board of Directors shall recommend to the 1966 convention an increase of \$6.00 in the annual dues of constituent and corporate members (from \$9.00 to \$15.00), and an increase of \$2.00 in the annual dues of associate members (from \$3.00 to \$5.00)."

The proposed increase is based on the need to expand the services of the Association, to provide the resources necessary to meet the membership demand for a greater scope of activities, and to develop closer communication between the membership and the Association with respect to these activities in behalf of the architectural profession. An adequate budget is required to accomplish these objectives.

Attention is called to the By-law provisions of Article VIII, sections 2 and 3, which provide that the amount of anual dues payable to the Association shall be determined by the annual convention, subject to the approval of a majority vote of the accredited delegates present, and provided further that the constituent organizations are notified at least 150 days before the annual convention of the proposed change in dues. The annual meeting and convention is scheduled to take place from October 6 to 9, 1966, at Whiteface Inn, Lake Placid, New York, exactly 158 days from the date of this notice.

It is recommended that each constituent organization notify its membership of the proposed increase in annual dues well in advance of the annual meeting and convention.

> Respectfully submitted, MAX M. SIMON Secretary, NYSAA

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# EMPIRE STATE ARCHITECT

MAY / JUNE, 1966

VOL. XXVI No. 3

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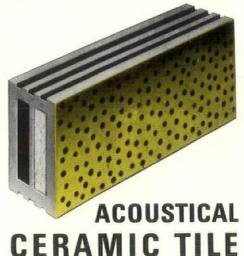
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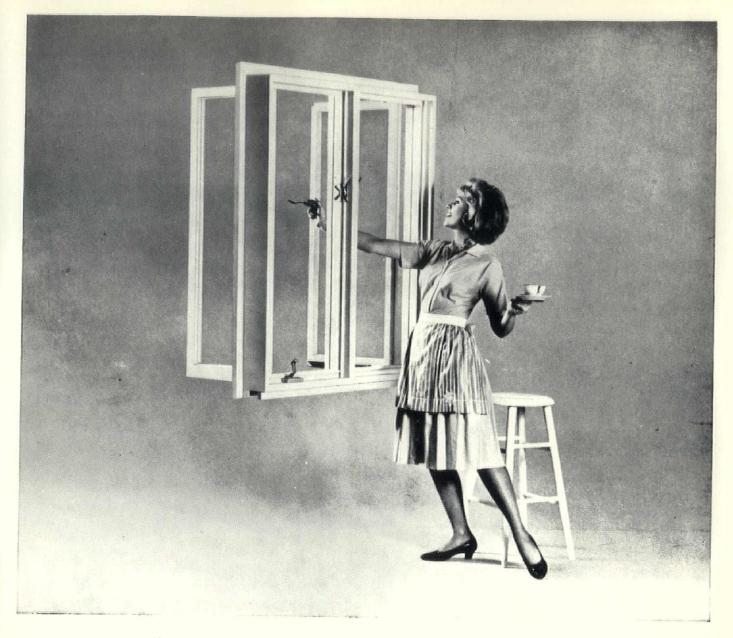
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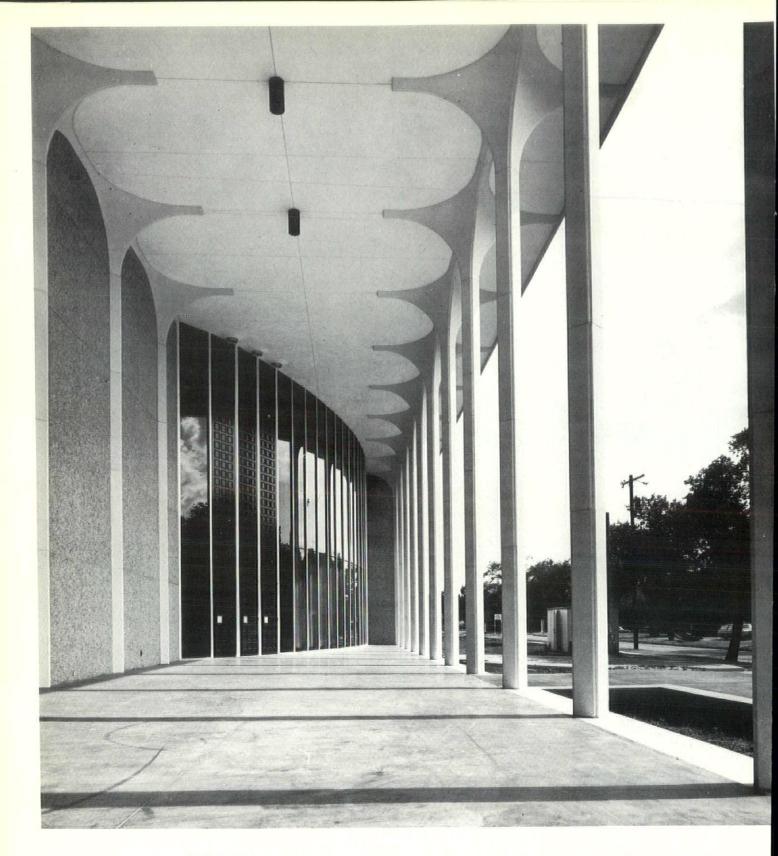
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# EMPIRE STATE ARCHITECT

OFFICIAL PUBLICATION OF
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State Organization of the American Institute of Architects

25th Anniversary Issue

MAY/JUNE, 1966

VOL. XXVI, No. 3

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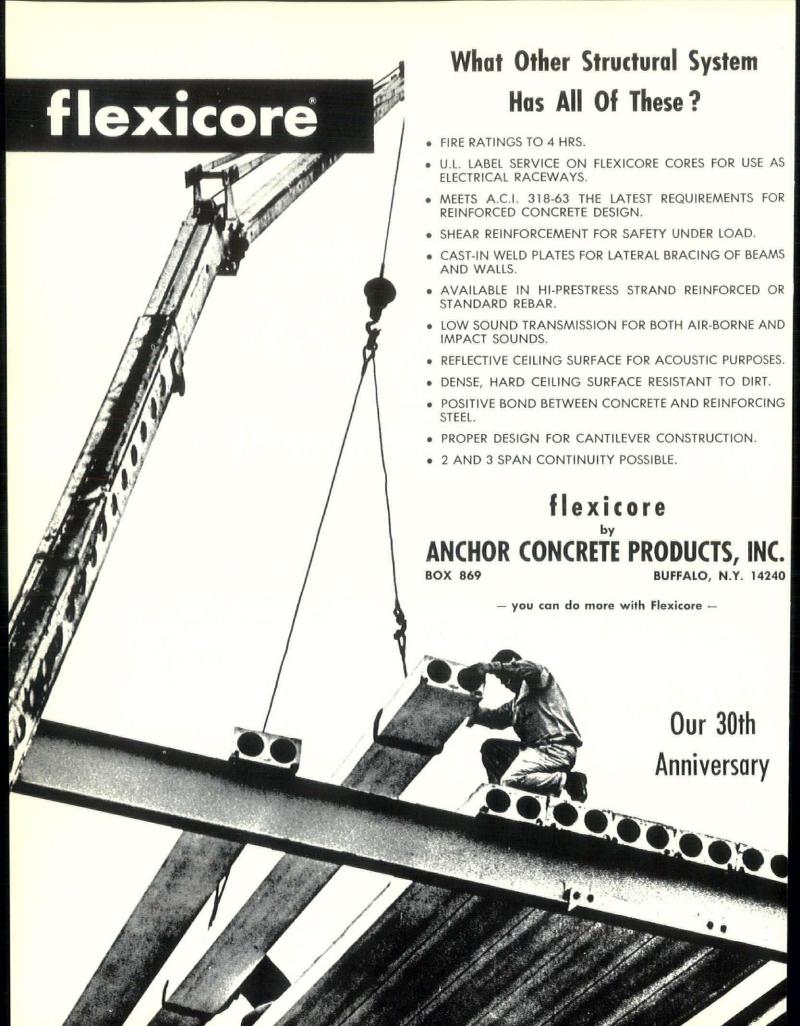
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#### EDITORIAL

#### Partners in Progress in 1966, 25 Years Later

Even the title has the distinction added by time. Some will recall 10 years ago when the Empire State Architect celebrated its 15th anniversary and published its May-June 1956, 15th anniversary, issue. It was here that "Partners in Progress" first appeared. It was the magazine's 15th and Anchor Concrete Products 20th year. Anchor Concrete was a charter advertiser, never having missed an issue. The Editor and Publisher both graciously recognized this relationship and were amenable to publishing an article on our parallel growth, that of the magazine and our firm. This became the "Partners in Progress" of 1956 which reviewed the first 15 years of the magazine and that of Anchor. In brief, it went something like this: In 1941 the Empire State Architect was an 8 page magazine which grew by 1956 to 48 pages. Anchor's first year production averaged 1600 - 8" concrete blocks per 8 hrs. day. By 1956 this was 32,000 units per 16 hrs. day. The Empire State Architect grew to become an outstanding magazine representing the Architectural profession in the greatest state of the Union. Anchor, in turn, went on to become the largest manufacturer of lightweight Haydite concrete products, under one roof, in New York State, and one of the largest in the United States.

The measure of progress is so often first thought of as growth in size. The first years of Partners in Progress were considered by this yard stick. The last 10 years of progress for both the Empire State Architect and Anchor has been the growth in maturity and sophistication rather than size. The magazine shows the subtle improvement that comes with age. The articles and the editorials show the mark of experience — the advertising work, the touch of professionalism — color and good design every where is evident.

The change of the last 10 years that brought Anchor to the 30th anniversary, too, are not those of size, but those of improvement and refinement that comes with time. In brief, these that are mentioned below are of vital interest to the Architect, for they are the tools, the building blocks and mortar with which the Architect builds:

1. Autoclave (Hi-Pressure Steam) curing of concrete blocks was initiated at Anchor in 1954 at a total cost of just under \$400,000.00, when it became the 12th plant in the U.S. to use this method. Now in 1966 this number is about 200. The advantages of this method of curing has become self-evident. Progressive manufacturers have been quick to embrace these advantages until they represent a majority of the unit production in the U.S. today. They have made this investment for quality despite the high capital expenditures for Autoclaves which exceeds in

most instances, the combined cost of all other concrete block equipment.

- 2. When quality rather than quantity became king, the need of a dimensionally stable lightweight concrete block became very important. A fundamental requirement to obtain this high quality is in the use of a good structural lightweight aggregate. Rotary kiln expand shale (Haydite) was superior to all others in most respects. With this in mind, in 1958 Anchor purchased the shale expanding operation of the John H. Block Co. at Jewettville, New York, and began using this excellent lightweight aggregate for its lightweight concrete blocks. This move, was typical for the most progressive plants in the industry. Nationally, good natural lightweight aggregates were and are in very short supply. The obvious step was to "man made" or manufactured lightweight aggregate, and expanding shale or clay by the rotary kiln method was admittedly the best. This also put Anchor into a new business of supplying Haydite aggregate for lightweight structural concrete, for use in the field in poured in place concrete structures where both lightweight and high strength are required. Anchor's Haydite is widely used in U.S., and fequently in the most remote spots of the world, for refractory purposes.
- 3. The importance of precast concrete for structural uses grew with leaps and bounds in the current years. First it was precast standard reinforcing steel, then high prestressing with steel strands for longer spans and heavier loads. Concurrent with this was a special precast 4" x 24" Flexicore Floor and Roof unit developed for hi-rise building construction by an under floor electrical distribution system, Flexoflor.
- 4. The industry already knew that the 16" long lightweight block was good. Anchor developed a 24" long block which it hoped would be 1½ times better! They are available in most all standard sizes, have proved to be a money-saver, and give the Architect a new scale with which to work.
- 5. Technical data handbooks for concrete masonry are available from the larger concrete products producers, but Anchor filled a real need when it brought out its latest manual in 1965, indexed. To be modest about it, Anchor indexed theirs for self1preservation. They had to know where to find answers in their own manual, and conceded that the

(continued on page 32)

## THE BROAD HORIZON OF ARCHITECTURE

by Morris Ketchum, Jr., FAIA President American Institute of Architects

> From an address at the Annual Meeting of the

Virginia Chapter A.I.A. Richmond, Virginia February 3, 1966 UNAIDED BY HIS FELLOW ARCHITECTS, with no shared fund of technical knowledge or common vocabulary of design and practice, no established and respected standards of professional conduct, no common defense against competitive professions and package dealers, no decisive voice in local, state and national legislation, no opportunity to improve the education and training for architecture no united effort to raise the status of the profession through public service, the individual architect might well fail to survive.

In the hard, cold world of competitive enterprise, only a few architectural giants might be able to make their way alone. Not all architects are giants and there are not enough giants to form a profession capable of meeting all the challenges they face today.

## If there were no American Institute of Architects, we would have to create one!

Fortunately, it has been in existence for more than a century. During that time, it has grown and changed from an exclusive club to a democratic national organization of approximately 18,000 corporate members and 4,000 associates representing 95 percent of all the architectural firms in this country. The Institute has at its command the resources, brains and manpower of the profession. It is devoting these assets to building a strong, united professional society which speaks and acts for every architect.

What Fortune Magazine called "the tweedy old profession of architecture" died with the great depression. The new generation which survived, fought and won the campaign for contemporary design. Today, we may argue among ourselves about how to design individual buildings but we are united in the cause of creating a great environmental architecture.

#### The Profession of Architecture is Small but Growing

That same magazine has reminded us that there are only 30,000 architects in this country, compared to 225,000 lawyers, 430,000 accountants, 975,000 engineers and 265,000 doctors. But we yield to no other profession in terms of ideas, inspiration and influence. We are ready, I believe, to respond to the millions of Americans who are demanding an architecture worthy of the richest nation on earth. It is not just an architecture of individual buildings nor multiples of buildings. It is an architecture which includes the design of complete new college campuses and residential neighborhoods, suburban shopping centers and downtown civic and cultural centers, new business districts and entire new satellite towns. Craftmanship in the design and execution of buildings is one of the most vital ele-

ments in architecture. Neglected, it is lost forever. We must constantly practice and perfect it, but if we stop there the individual building will never be complete. It will lack its proper architectural setting. Remember that Thomas Jefferson, a great president and a great architect, designed many individual buildings, including the state capitol in Richmond, but he asked that there be carved on his gravestone "Father of the University of Virginia." He realized, I believe, that this great achievement in education and in environmental architecture outshone all his other projects.

Our architecture must always successfully interpret the social, economic and psychological demands of society in physical terms. It should be capable of meeting man's daily needs and inspiring his mind and heart. Architects draw their strength from public service, and the public is the real client of their profession. They exist to serve man and have never had a better opportunity to serve him. The majority of mankind now lives in cities, and the design of cities has been, is now, and always will be the province of the architect.

Across the nation, our profession has created soul stirring examples of what our cities could be if all of us joined forces to rescue and rebuild them. Larger cities like Boston, Philadelphia, Baltimore, Detroit and San Francisco; smaller cities like Little Rock, Rochester, Hartford, Urbana and Canton, have planned or built, or are building, a new urban architecture worth living in. These are cities of the future. Their number is constantly increasing.

#### Urban Design Is Environmental Architecture Based On Environmental Planning

As Ada Louise Huxtable said recently in the New York Times:

"Environmental planning means that you don't locate industry to pollute rivers that a growing population will depend on for water supply. You don't cut down forests to construct speculative houses where residents will need these natural woodlands for attainable recreation as population densities increase, or put up suburban subdivisions where mass transport is weakest for commutation and make no provisions to strengthen it. You don't build without preplanned and prebuilt water and sewage facilities; you don't hop, skip and jump housing developments over open land without consideration of distances and relationships to job centers, educational, cultural and recreation sources, and transportation tie lines."

City, suburb, satellite city and region are interlocked in form and function. They must be planned together for public and private benefit if this country is to have a living environment worthy of the name. It is high time for action. Within the next decade, our mounting population, the dwindling land supply, and the expanding growth of our technology will either result in the creation of livable and beautiful cities, or the city will diffuse into densely built up metropolitan regions without form, amenity or any of the grace and beauty worthy of a mature and responsible society.

In Virginia, for example, the great megalopolis which stretches from Boston to Washington has brought its downtown congestion, suburban sprawl and visual squalor across the Potomac and on into major urban areas. Now is the time to plan for action before it overwhelms the countryside.

#### The Future Lies In The Cities, Not The Farms.

The root of the great urban crisis is wealth, not poverty. A poor nation would not be able to replace trees with parking lots, litter the streets with signs, fill the air with wires and tear up historic neighborhoods to build new freeways. Only an economy based on the theory of overproduction and planned obsolescence could fill the nation's junkyards with non-disposable automobile skeletons. Only a philosophy of haste and waste could squander our land, pollute our air and our water to produce suburban sprawl and urban smog.

#### If America Really Wants A Livable Environment, It Must Prepare Itself To Pay For It

We've got to put the future of the community ahead of the quick buck, the long term investment ahead of the overnight profit. The political issue is no longer one of planning versus haphazard growth. Only the most misguided sort of person would argue that community design is undesirable. We have seen and are still seeing the urban ugliness and disorder that result from the philosophy that land can be treated as a commodity for random and unlimited exploitation.

Yet our obsolete zoning laws still promote the division of our cities into separate areas of part time use. Our Wall Streets are dead at night; our Times Squares are dead in the daytime. Farther out in suburbia, laws unfavorable to cluster zoning produce endless checkerboards of commonplace homes and block the development of self contained communities ringed by open greenbelts. There is no legal recognition of community needs for education, relaxation and recreation.

We have failed to use our proud technology to solve our massive problems of urban transportation.

(continued on next page)

#### THE BROAD HORIZON OF ARCHITECTURE

Instead, we have allowed our national love affair with the automobile to swamp our cities with traffic; to blight urban residential areas with noise, confusion and poisoned air; to drive the city's inhabitants and the retail trade which serves them into suburbia, to deplete central city tax rolls and to create all the honky tonk squalor which lines our highways. The combined automobile explosion and population explosion threaten to overwhelm us.

The size and scale of our cities are growing to a point where conventional cars and busses must be considered obsolete as the only transportation tools of the twentieth century. Only a balanced combination of private automobiles and modernized public rapid transit systems hold any hope for a solution for metropolitan and regional transportation. Within downtown areas, we are just beginning to provide the physical means of separating motor and pedestrian traffic — a basic requirement for urban design. The cities of the world which we admire the most were planned largely for pedestrians and at a pedestrian scale. The best of our urban architecture attempts to restore some of this amenity and scale to our city centers.

The federal subsidies which have encouraged highway construction without encouraging mass commuter transportation have helped to explode the city into suburbia. At the same time they have contributed to depleting central city tax rolls. This loss means less money for education and for neighborhood maintenance. Poor schools and changing neighborhoods encourage middle class families to move to the suburbs. Higher welfare costs increase taxes and thus encourage industry to relocate outside the city. All these factors are interrelated. If they can be changed, it would help to reverse the current cycle of urban decay and deterioration.

Still more important, our tax laws now misuse the profit motive of our free enterprise system by undertaxing land and overtaxing improvements. These laws make slums profitable through low taxes and penalize improvements to slum buildings by raising taxes, and reward the speculative builder of mediocre architecture by imposing high taxes on better architecture. They even go so far as to tax private owners for donating land to public use as parks and plazas. If we want better cities, we should tax our slums out of existence, give tax rebates for better buildings and improved residential districts and make it profitable to donate land to the community.

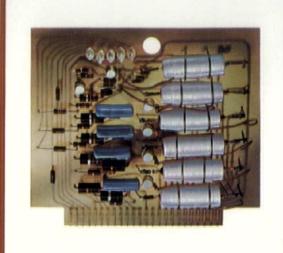
Now we must face a fundamental decision. We know that our present system of unlimited and uncontrolled speculation is disastrous, yet we hesitate to employ the policy of sweeping governmental control which planned and built sparkling new towns of Great Britain and Scandinavia. The time for hesitation is past. The successful examples of urban renewal here in America prove that there is no good reason why government and private enterprise should not join forces in the redevelopment of the American city. If tomorrow's cities are to be different from the cities of yesterday in which we now live, this is the solution.

#### Architects Can't Make The Decision Alone

They are the servants of society, not its masters, and can only achieve what society asks them to achieve. Architects can nevertheless help to determine public policy by working with sociologists, economists, scientists and statesmen to analyze fundamental urban and regional problems and formulate a solution. Under the present national administration, it looks as if they would soon have the chance to do so. President Johnson's logical plan for rebuilding the nation's urban slums — the Great Demonstration Cities Program — and for creating new satellite cities instead of suburban sprawl, will open the door to great achievement. We need big plans like this if we are to have sound urban growth in all our cities.

The problem that confronts us is essentially the same all over the country. We are living in yesterday's cities — cities planned for the horse and buggy, for the social, economic and political needs of the past century. We need cities that meet the needs of today's social demands — cities which can grow, without inhuman economic and social pressure, into the cities of tomorrow. After that, our profession has proved and will continue to prove that we know how to design towns, cities and regions. Architects and their fellow design professionals are the only ones with the skills to translate social and economic needs into the structures, spaces and beauty of the new cities of tomorrow.

The city is the natural gathering place for our thinkers, our innovators and our specialists. It is where education flourishes and art is born. It is the generator of our national wealth. The city sets the quality of life for every American. There is no earthly reason why it should be dirty, dull, ugly and generally unlivable. It should be our greatest work of art. It will be, when an enlightened public, strong community leadership, a sympathetic government and the architectural profession and its allies have revitalized and rebuilt it. To this cause, the architects of America dedicate themselves, now and in the years to come.



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\*Haughton's advanced program in systems research and engineering, with specific emphasis on the creative application of electronic devices and instrumentation for betterment of systems design and performance. Registered, U. S. Patent Office.



## THE MYSTERIOUS PRACTICE OF ARCHITECTURE

by Samuel M. Kurtz, A.I.A.

It is strange that so old and honored a profession as architecture should be so misunderstood. Too many otherwise knowledgeable people think of architects as "exterior decorators", as "makers of blue prints", as contractors who "bid" for jobs. Not enough people know the architect as a master planner, an inspired designer, a coordinator of all the internal and external components that result in a completed structure ready and able to serve its occupants for its intended function.

Too few realize that the architect is trained in all the arts, structural, mechanical and electrical engineering, site planning, construction technology, and contract administration, and that these services are actually performed by him or under his direction.

Another aspect in which there is much misunderstanding is the architects "fee". As a professional, the architect's payment for his services is given this terminology; and for practical reasons it is most often a percentage based upon and related to the construction cost of the project. Very few know that this "fee" includes the cost of (and fees paid to) structural and engineering design consultants, as well as the cost of the services of architectural draftsmen, specification writers and other technical workers, inspectors of construction, contract administration, and the maintenance of adequate space and clerical staff to enable this work to be done. The actual "fee" for the architect as a professional man is actually what is left after all such costs are deducted, and often, is a small percentage of the total "fee".

It has been said that the architect's services and his fee are obscure on indefinite, in spite of the fact that the American Institute of Architects and its chapters throughout the country publish individual statements of such services, and schedules of recommended minimum fees. This has been done for many years. In New York City the New York Chapter has been publishing such documents since 1947 and the New York Society of Architects since 1912. These two organizations represent about 3,000 architects in the N. Y. Metropolitan area. The documents are revised periodically.

In January 1966 the N. Y. Chapter A.I.A. published its latest revision of its Statement of Services and Charges of the Architect. It is written in non technical language and covers such subjects as the selection of the architect, services of the architect, responsibilities of owner and architect, compensation of the architect, payment to the architect, supplementary information, standards of professional practice, and a fee schedule applicable to ten building type groups. With this document available there is no mystery regarding an architect's services and his compensation, if there ever was any mystery at all; and any architect would be pleased to discuss the services he performs and the cost of such services with any prospective client.



We who make Belden Brick are admittedly a proud company proud of our manufacturing facilities, our skillful personnel and our reputation for a quality product. But Belden people are keenly aware that our company has enjoyed growth and progress only because of the confidence architects like yourself have in our company and products. Today, every manufacturer is faced with the choice of making his product meet a standard of quality or a standard of price. We can not and will not violate your confidence by compromising product quality. This is the basic concept of The Belden Brick Company.

"Belden does not violate customer confidence by compromising product quality."





## FRANKLIN DELANO ROOSEVELT POST OFFICE STATION NEW YORK CITY, NEW YORK

Lawrence F. O'Brien Postmaster General, U.S.A.

Robert K. Cristenberry Postmaster of New York

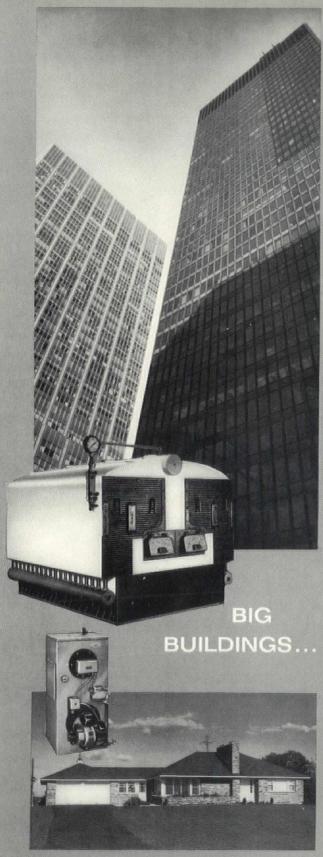
The Office of Max O. Urbahn Emery Roth & Sons Architects

Tishman Realty & Construction Co. Contractors

EARLY IN MARCH 1966, POSTMASTER GENERAL LAW-RENCE F. O'BRIEN POURED THE INITIAL CONCRETE FOR THE FRANKLIN DELANO ROOSEVELT POSTAL STA-TION IN MIDTOWN MANHATTAN, THE FIRST OF THREE MULTI-MILLION DOLLAR POSTAL BUILDINGS TO BE CONSTRUCTED. THE NEW POST OFFICE WILL BE CAPPED BY A 28-FLOOR COMMERCIAL OFFICE TOWER. THE STRUCTURE WILL COST \$35 MILLION, IT WILL BE THE FIRST MAJOR POSTAL BUILDING TO BE BUILT IN NEW YORK CITY SINCE THE CHURCH STREET STATION CONSTRUCTED IN 1937. IN THAT YEAR, THE NEW YORK CITY POST OFFICE HANDLED FOUR BILLION PIECES OF MAIL. THIS YEAR, THE ANNUAL VOLUME HERE IS APPROACHING 11 BILLION. SEVERE SPACE LIMITATIONS AND DELAYS CAUSED BY HEAVY TRAF-FIC AS MAIL IS SHUTTLED FROM BUILDING TO BUILD-ING IN THE NATION'S LARGEST CITY HAVE HAMPERED EFFORTS TO SPEED NEW YORK POSTAL SERVICE. IT IS EXPECTED THAT THE FDR STATION, COUPLED WITH THE ADDITION OF MODERN MECHANIZED EQUIP-MENT, WILL BRING ABOUT AN IMPORTANT IMPROVE-MENT IN THE FLOW OF MAIL IN NEW YORK CITY. CONSTRUCTION IS EXPECTED TO BE COMPLETED BY LATE SUMMER OF 1967. THE POST OFFICE DEPART-MENT WILL RENT TWO BASEMENT LEVELS AND THE FIRST FOUR FLOORS. THE UPPER 28 STORIES WILL BE RENTED TO COMMERCIAL TENANTS. THE POSTAL SER-VICE WILL LEASE NEARLY 500,000 SQUARE FEET OF SPACE. THE CONCEPT, DESIGN AND ENGINEERING OF THE PROJECT WERE DEVELOPED BY THE OFFICE OF MAX O. URBAHN, ARCHITECTS. THE FIRM OF



EMERY ROTH AND SONS IS THE CONSULTING ARCHI-TECT FOR THE OFFICE TOWER, POSTAL BUSINESS WILL BE TRANSACTED IN A SPACIOUS LOBBY ON THE SECOND FLOOR, ACCESSIBLE BY ESCALATORS LO-CATED IN A SEPARATE ENTRANCE ON THE STREET LEVEL. THE GROSS AREA OF THE BUILDING IS TO BE 1.2 MILLION SQUARE FEET WITH 730,000 FEET DE-VOTED TO THE OFFICE TOWER. THE UPPER FLOORS WILL HAVE AN UNUSUALLY WIDE COLUMN SPACING OF 30 FEET WHICH WILL OFFER TENANTS A FLEXIBIL-ITY IN OFFICE DESIGN. WINDOWS WILL BE OF AMBER TINTED GLASS SET IN BRONZE HUED ALUMINUM FRAMES. EACH TOWER FLOOR WILL BE .APPROXI-MATELY 26,000 SQUARE FEET. THE FOUR FLOOR BASE OF THE BUILDING WILL BE SET BACK 25 FEET FROM THE THIRD AVENUE BUILDING LINE. THE TOWER POR-TION WILL BE SET BACK 50 FEET. THERE WILL BE AN ARCADED TREE-LINED PLAZA ALONG THE ENTIRE BLOCK. THE FLOORS WILL BE POST-TENSIONED CON-CRETE SLABS AND BEAMS. THE FDR STATION WILL BE THE PRIMARY DISTRIBUTION AND SORTING POINT FOR ALL PARCEL POST ORIGINATING BETWEEN 41st STREET AND THE HARLEM RIVER EAST OF FIFTH AVE-NUE, APPROXIMATELY \$1.5 MILLION IN MECHANIZA-TION WILL EXPEDITE THE PROCESSING OF THE MAIL. PARCEL POST IS NOW HANDLED MANUALLY AT SIX OTHER STATIONS. THE CONSOLIDATION INTO FDR STATION WILL HELP ELIMINATE CONGESTION IN THESE STATIONS AND ALLOW MORE CONCENTRA-TION ON DELIVERY OF FIRST-CLASS MAIL IN THE AREAS THEY COVER.



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ROBERT ALFRED GREEN • ARCHITECT

THIS FOUR STORY, AIR-CONDITIONED LIBRARY, SCHEDULED FOR CONSTRUCTION EARLY SPRING 1966, WILL HOUSE IN EXCESS OF 80,000 VOLUMES WITH PROVISIONS FOR RESEARCH AND STUDY FOR 1000 STUDENTS AND FACULTY. WITH MINOR ADDITIONS IN STACK AREAS, THE BUILDING IS DESIGNED TO ACCOMMODATE 250,000 VOLUMES. DESIGNED TO MEET THE PRESENT COLLEGE REQUIREMENTS OF TODAY AND THE GROWING NEEDS OF THE FUTURE, THE NEW LIBRARY IS PLANNED WITH SUFFICIENT FLEXIBILITY TO MAINTAIN ITS EFFICIENCY FOR YEARS TO COME. THE ARCHITECTURE AND INTERIOR SPACES WILL PROVIDE MODULAR FLEXIBILITY TO ENABLE THE LIBRARY TO BE ENLARGED, CONSOLIDATED, OR TOTALLY CHANGED IN CONCEPT, TO ACCOMMODATE NEW METHODS OF LIBRARY PROCEDURE AS THEY DEVELOP IN THE FUTURE. CONSTRUCTION WILL BE OF COMPOSITE STEEL AND CONCRETE WITH THE EXTERIOR OF NATIVE WESTCHESTER STONE AND SLATE TRIM, COMPLEMENTING THE EXISTING CAMPUS BUILDINGS. INTERIOR FINISHES WILL BE IN KEEPING WITH THE BASIC CONCEPT OF THE PREVIOUS BUILDINGS UTILIZING MINIMAL MAINTENANCE MATERIALS SUCH AS NATURAL WOODS, LAMINATES, STAINLESS STEEL AND INTEGRALLY COLORED MODULAR MASONRY UNITS.



Burns Brothers, Photographers

## STATE UNIVERSITY CONSTRUCTION FUND • STATE OF NEW YORK STATE UNIVERSITY COLLEGE, ONEONTA, NEW YORK SCIENCE BUILDING

FRANCIS X. GINA AND ASSOCIATES • ARCHITECTS

THIS IS THE SECOND SCIENCE BUILDING WHICH WILL BE BUILT AT THE STATE UNIVERSITY COLLEGE AT ONEONTA AT A COST OF \$1.8-MILLION BY THE STATE UNIVERSITY CONSTRUCTION FUND. IN THE BASEMENT WILL BE LOCATED CHEMISTRY AND PHYSICS RESEARCH LABORATORIES WHILE ON THE FIRST FLOOR WILL BE ADVANCED PHYSICS, NUCLEAR PHYSICS, ELECTRONICS, PHYSICAL SCIENCE, GENERAL PHYSICS, RESEARCH AND OPTICS LABORATORIES; AND ON THE SECOND FLOOR THERE WILL BE GENERAL CHEMISTRY, ANALYTICAL CHEMISTRY, PHYSICAL CHEMISTRY, ORGANIC CHEMISTRY AND RESEARCH LABORATORIES. A CLASSROOM WILL BE LOCATED ON EACH FLOOR IN ADDITION TO NUMEROUS FACULTY OFFICES. THIS BUILDING WILL COMPLEMENT THE RECENTLY COMPLETED SCIENCE AND MATHEMATICS BUILDING AT THE COLLEGE AT ONEONTA.

## HOW DOES A BUILDING GET BUILT?

By James J. Souder, A.I.A.\*

This material was prepared for a seminar held at New York University. Often the information is available in a "Statement of Services" which is issued with a schedule of architects fees by Architectural Societies and A.I.A. Chapters. Seldom does such a statement cover the detail contained in this outline. It should not only be of value to students but it can serve to inform prospective clients, and as a check list for the architect and engineer concerning their responsibilities.

OUTLINE OF THE FUNCTIONS OF OWNER, ARCHITECT, CONSULTING ENGINEER AND CONTRACTOR IN THE CONSTRUCTION OF BUILDINGS.

## I. THE OWNER'S FUNCTIONS

## A. BEFORE CONSTRUCTION BEGINS:

- 1. Determines need for a building
- 2. Selects Architect
- 3. Selects and acquires site
- 4. Orders survey of site
- 5. Authorizes study of building's requirements for space and facilities.
- 6. Approves, in order:
  - a. Program of requirements
  - b. Architect's and engineer's preliminary sketches and outline specifications
  - c. Preliminary budget of building cost based on the sketches
- 7. Arranges financing
- Authorizes architects and engineers to prepare working drawings and specifications.
  - a. Approves working drawings and specifications
- With the architect's advice select the type of construction contract to be offered on the market.
- With the architect's advice selects a list of contractors competent to undertake the contract.
- Advertises the contract, receives sealed bids, opens bids publicly, awards contract and issues proceed order to the contractor.

### B. DURING CONSTRUCTION:

- Defines authority for ordering work or changes in the work. Arranges liaison between this authority, architect and contractor.
- 2. Secures fire insurance on completed work and any other insurance required by law.
- 3. Approves list of subcontractors whom the contractor proposes to employ.
- Approves colors, samples of materials and equipment, all on recommendation of the architect or engineer.
- 5. Authorizes architect to employ a full time field inspector (clerk of the works) if full time inspection of contractor's work is desired over and above architect's periodic inspection visits.
- Receives contractor's monthly applications for payment for completed work, certified by the architect, and pays them promptly.
  - Usually retains a percentage of payment due until overall completion of the work.

<sup>\*</sup>James J. Souder, A.I.A. is a consulting architect with the firm of Bolt, Beranek and Newman, Inc. He formerly practiced architecture in New York as a partner in the firm of Kiff, Colean, Vosse, Souder — The Office of York & Sawyer.

- Authorizes changes in the work after receiving estimates and the architect's recommendation.
- With the architect's advice issues final acceptance of the completed building to the contractor.
- Receives and pays final application for payment from the contractor including retained percentages.
- Arranges purchase of movable equipment and furniture for delivery prior to opening. May or may not employ architect for this.

## C. AFTER CONSTRUCTION IS COMPLETED

- 1. Makes careful provision for safekeeping of:
  - a. As-built drawings
  - b. Guarantees
  - c. Operating instructions and manuals
- During life of guarantee calls on contractor to correct any deficiencies in the work as they appear.
  - May ask architect to determine contractor's responsibility for such deficiencies.
- Initiates program for preventive maintenance.

### II THE ARCHITECT'S FUNCTIONS

## A. BEFORE CONSTRUCTION BEGINS

- Assumes overall responsibility for design and inspection of construction and selects consulting engineers on basis of:
  - Ability and experience for the particular project proposed.
- 2. Evaluates the owner's idea for proposed building and gives preliminary advice on:
  - a. Characteristics to be desired in a site.
  - Approximate cost to be expected, based on experience with similar buildings.
    - (1) May consult with engineers, contractors, other architects.
  - Length of time required to design, build and equip the building.
  - d. The way owner, arehitect, engineer and contractor can best organize their forces to tackle the project.
- 3. Prepare program of building requirements in consultation with owner.
- Familiarize himself with local building codes.
- 5. Prepares preliminary sketches and outline specification for owner's approval.
  - May start with diagrammatic master plan for long range development and more complete plans for first step.
  - Submits budget based on sketches and specifications.

- 6. Prepares working drawings and specifications for owner's approval.
  - Consults owner for preference on equipment, finishes.
    - (1) Points out qualities of equipment and finish in terms of first cost vs. maintenance cost, aesthetic effect, propaganda value, availability.
  - b. Coordinates work of consulting engi-
- 7. Advises owner on bidding procedure
  - a. Type of construction contract to be used.
  - b. Formalities of fair bidding
  - c. Opening and tabulating of bids
  - d. Verification of bid security
  - e. Notification to successful bidder, signing of contract and notice to contractor to proceed with work.

## B. DURING CONSTRUCTION

- Assists as needed in securing building permit
- 2. Secures from contractor:
  - a. Proposed schedule of work
  - b. Names of all subcontractors and breakdown of their contract amounts, to used in certifying periodic payments by the owner.
    - (1) Unit prices for any work
  - Evidence of insurances, performance and payment bonds required by the contract.
  - d. Contractor's plan for storing materials and equipment on the site.
  - e. Contractor's arrangements for office space and equipment for the full time field inspector (clerk of the works).
  - f. Agreement on job procedures, forms to be used for the job records and applications for payment.
- 3. With owner and contractor schedules regular joint meetings to review job problems and progress.
- 4. Establishes and maintains records of original contract cost, certifications to date and amount yet to be paid, together with all authorized changes in contract cost and contract time.
- 5. Makes periodic inspection visits to job.
  - a. Checks samples of materials and equipment for conformance to specifications.
  - Examines workmanship and work in place for conformance to specifications.
  - c. Interprets intent of plans and specifications when questions are raised by contractor and prepares and issues additional clarification drawings as required. (continued on next page)

### HOW DOES A BUILDING GET BUILT

(1) His decisions are final on matters relating to artistic effect; on other questions — subject to arbitration.

 Recommends adjustment of field conflicts either by adjustment of work under contract or by change in scope or design of work under contract. (Change Order)

 Reviews with the contractor monthly applications for payment prior to certifying them to the owner.

 Reviews progress schedule with the contractor.

g. Tries to forsee job difficulties or delays and to assist contractor in obviating them.

 Ascertains that owner's responsibilities for choice, decision and payment are being met promptly and effectively.

 Reviews status of job with the full time field inspector and issues to him any special instructions necessary to safeguard the welfare of the job.

j. Checks scheduled testing of piping, communication systems and other items specified for test; arranges to be present for tests when necessary or to have his consulting engineers present.

- 6. Receives all detailed fabrication or placement drawings for materials and equipment (shop drawings) from the contractor, checks them for conformity to intent of plans and specifications and returns them approved for manufacture and incorporation in the building.
  - a. Refers engineering shop drawings to his consulting engineers.
- 7. Periodically reviews status of work with owner, keeps owner advised of progress, adherence to budget, and anticipated job problems.
- 8. Prepares plans and specifications for any extensions or deletions of work ordered by the owner, submits them to the contractor for estimate, secures owner's final approval or disapproval and advises contractor of authorized changes in formal change order to the contract.
- 9. Secures owner's approval of colors, samples of finishes, etc. and advises contractor.
- 10. Arranges periodic inspection visits of consulting engineers as required.
- 11. As job approaches completion makes detailed inspection of all work, and has consulting engineers make similar inspection, noting all incomplete or unsatisfactory items in a "punch list" which is given to the contractor.

- 12. Makes final inspection.
- Checks all guarantees, operating instruction manuals, as-built drawings, spare parts for equipment submitted by the contractor for assurance that contract requirements have been met.
- Verifies that contractor has turned over to the owner a release of liens from each subcontractor.
- Certifies to the owner that the contract is completed and recommends final payment to the contractor.

## C. AFTER CONSTRUCTION IS COMPLETED

- 1. Checks periodically with owner during guarantee period to see whether any deficiencies in the work have appeared. Advises owner in advance of guarantee expiration date (usually one year after acceptance of the work).
- Answers owner's questions regarding operation and maintenance of building and equipment.
- 3. Maintains file of the plans and specifications of the building.

## III THE CONSULTING ENGINEER'S FUNCTIONS

## A. BEFORE CONSTRUCTION BEGINS

- 1. Assumes responsibility for design and inspection of his phase of the construction project.
- 2. Contributes specialized knowledge to the architect's evaluation of the owner's idea for proposed building in terms of:
  - a. Comparative desirability, costs and flexibility of different types of:
    - (1) Structural systems
    - (2) Utilities, supply and distribution.
    - (3) Heating, ventilating and air conditioning systems.
    - (4) Electrical and communications systems
    - (5) Site development
  - Suitability of special equipment, materials or methods pertinent to the engineering phases of the work.
- Familiarizes himself with local building codes.
- 4. Advises architect during preparation of preliminary sketches and outline specifications regarding
  - Space required for structural elements and mechanical and electrical services.
  - b. Appropriate methods of distributing services.
  - c. Budget.
- Prepares working drawings and specifications for his phase of the work.

(continued on page 23)

## THE BARD AWARDS for excellence in architecture and urban design

The Bard Awards Program broke new ground by giving two of its three 1966 First Honor Awards for Excellence in Architecture and Urban Design to open spaces rather than to buildings. Reflecting a growing national concern about the quality of our cities, the 1966 Bard Awards Jury stated, "This Jury felt at the outset that excellence in architecture and urban design are, in fact, one requirement when building in the city today. The projects which are being honored recognize that any building or open space proposal in the city today has the responsibility to create continuity at a minimum but, beyond that, must strive to enrich visually the urban setting of which it is a part."

The fourth annual Bard Awards were presented on Monday, April 25 at a reception at The Plaza by The City Club of New York Albert S. Bard Civic Award Trust Fund. Mayor John V. Lindsay was the

guest of honor and principal speaker.

Recipients of the Bard First Honor Awards for Excellence in Architecture and Urban Design were as follows: the Henry L. Moses Institute of the Montefiore Hospital and Medical Center, Philip Johnson, Architect; the Sculpture Garden at the Museum of Modern Art, Philip Johnson, Architect and Zion & Breen, Landscape Architects; and Lincoln Center Plaza North, a collaborative design effort of Harrison & Abramovitz, Philip Johnson Associates, Eero Saarinen and Associates, Skidmore, Owings and Merrill and Pietro Belluschi and Catalano & Westermann, with Landscape Consultant, Dan Kiley.

At a special ceremony preceding the presentation of the Bard Awards, The City Club of New York gave its Ad Urbum Perfectiorum citation for outstanding public service to Jacob M. Kaplan, founder of the J. M. Kaplan Fund, Inc., Chairman of the Board of the New School for Social Research and a sponsor of its new Center for New York City Affairs.

Awards Jury

This year, the Bard Awards Program was open to privately commissioned projects completed within New York City since January 1, 1964. The winners were selected by an Awards Jury of four of the nation's most distinguished architects including: Ulrich Franzen, A.I.A., John M. Johansen, A.I.A., Albert Mayer, F.A.I.A., and Paul Rudolph, A.I.A. The Bard Award Trust Fund was represented on the Jury by Sidney W. Dean, Jr., Chairman of the Board of the Fund, and a Vice-President of The City Club.

Henry L. Moses Institute - First Honor Award

The Henry L. Moses Institute is a 10 story medical research building located on Gun Hill Road in the Bronx, adjacent to the Montefiore Hospital and Medical Center. The Awards Jury describes it as, "A tower scheme brilliantly sited so as to animate and visually organize the intersection of four roads. This

work succeeds equally well in becoming the architectural focal point of a confusing jumble of hospital buildings. It represents a first-rate example of urban architecture involved with its setting, clarifying it as well as enriching it."

Sculpture Garden, Museum of Modern Art – First Honor Award

The recently extended Sculpture Garden of the Museum of Modern Art was cited by the Bard Awards Jury as an important achievement in both space and time. They describe it as "a distinguished oasis for pedestrians offering a variety of spaces for the enjoyment of sculpture and just plain walking. This urban space evolved over a number of years responding to new needs and therefore demonstrating that first-rate urban solutions need not be instant architecture."

Lincoln Center Plaza North - First Honor Award

The efforts of all of the architects involved in the design of the several buildings at Lincoln Center fused successfully in the creation of an important new public space for New York: Lincoln Center Plaza North. Focusing again on the ingredients of successful urban design, The Bard Awards Jury commented, "In the frenetic tempo of our great cities and, particularly, in New York, one of the most significant contributions demanded is the creation of space where the eye, the mind, the spirit can achieve serenity, a degree of detachment from the immediate hub-bub. Lincoln Center Plaza North fully accomplishes this, by an admirable relationship of structures and satisfying space definition which in a sense excludes the restless world while still leaving us aware of it just beyond. This is achieved by proportion of horizontal dimensions, and above all by the character and placement of the magnificent sculpture by Henry Moore. The simplicity and compelling scale of the Theater-Library facade and of the always revealing sculpture hold the attention of the eye. The presence of the noisy city is dwarfed by the power and humanity of the space."

**Jury Summation** 

In summation, the Awards Jury commented that "although there were a great many examples of first rate architecture, the Jury felt that most of these represented the tradition of individual buildings standing apart from the larger context of the city. In general, this manifested itself by either not recognizing the opportunity for an architectural dialogue with the adjoining city, or by outright rejection of it."

The Bard Awards Program was created in 1961 to encourage excellence in architecture and urban design in New York. Its name honors the late Albert S. Bard, a former trustee of The City Club who for 60 years battled vigorously for a better, more beautiful

city.



"THE PRESENCE OF THE NOISY CITY IS DWARFED BY THE POWER AND HUMANITY OF THIS SPACE."

## FIRST HONOR AWARD FOR EXCELLENCE IN ARCHITECTURE AND URBAN DESIGN

### LINCOLN CENTER PLAZA NORTH

- LOCATION Lincoln Center, Manhattan
- ARCHITECT Harrison & Abramovitz
  Philip Johnson Associates
  Eero Saarinen and Associates
  Skidmore, Owings and Merrill
  Pietro Belluschi and Catalano & Westermann
- LANDSCAPE CONSULTANT Dan Kiley
  - SPONSQR/OWNER Lincoln Center for the Performing Arts, Inc.
    The Department of Parks
  - GENERAL CONTRACTOR Slattery Contracting Company, Inc.

THE BARD AWARDS for excellence in architecture and urban design



"A FIRST-RATE EXAMPLE OF URBAN ARCHITECTURE INVOLVED WITH ITS SETTING, CLARIFYING IT AS WELL AS ENRICHING IT."

## FIRST HONOR AWARD FOR EXCELLENCE IN ARCHITECTURE AND URBAN DESIGN

## HENRY L. MOSES INSTITUTE

LOCATION • Gun Hill Road, The Bronx, New York

ARCHITECT • Philip Johnson

STRUCTURAL ENGINEER • Lev Zetlin & Associates

OWNER • Montefiore Hospital and Medical Center

GENERAL CONTRACTOR • Turner Construction Company

THE BARD AWARDS for excellence in architecture and urban design



A DISTINGUISHED OASIS FOR PEDESTRIANS OFFERING A VARIETY OF SPACES FOR THE ENJOYMENT OF SCULPTURE AND JUST PLAIN WALKING."

## FIRST HONOR AWARD FOR EXCELLENCE IN ARCHITECTURE AND URBAN DESIGN

## MUSEUM OF MODERN ART SCULPTURE GARDEN

- LOCATION 54th Street, between Fifth and Sixth Avenues, Manhattan
- ARCHITECT Philip Johnson
- LANDSCAPE ARCHITECT Zion & Breen
  - OWNER Museum of Modern Art
- GENERAL CONTRACTOR George A. Fuller Company

THE BARD AWARDS for excellence in architecture and urban design 22 / EMPIRE STATE ARCHITECT — MAY-JUNE, 1966

## HOW DOES A BUILDING GET BUILT (continued from page 18)

- a. Coordinates his efforts with those of architect and other engineers to be sure work can be installed without space conflict.
- b. Consults with architect and owner on preferences for equipment and materials.
  - (1) Analyzes first cost and maintenance cost, making comparative estimates where necessary.

## B. DURING CONSTRUCTION

- 1. Assists as needed in securing building per-
- 2. Advises architect on competence of proposed subcontractors on his work.
- 3. Reviews subcontract price breakdown and unit prices which affect his work.
- 4. Make periodic inspection visits to job as requested by architect.
  - a. Check samples or manufacturer's data on proposed materials and equipment.
  - b. Checks laboratory or field test data required by the contract. Observes tests when required.
  - c. Observes placement and testing of critical portions of the work.
  - d. Interprets intent of his portion of plans and specifications when questions are raised by contractor and issues clarifying sketches as required.
  - e. Assists architect in resolving field conflicts in the work.
  - f. Examines workmanship and work in place for conformance to plans and specifications.
  - g. Advises architect on job progress and status of completion of his phase of work in relation to architect's certification of monthly applications for payment from the contractor.

- h. Tries to foresee job difficulties or delays and to assist architect and contractor in obviating them.
- 5. Receives from the architect all detailed fabrication or placement drawings (shop drawings) pertinent to his designed work, checks them for conformance to intent of plans and specifications and returns them approved for manufacture and incorporation in the building.
- 6. Prepares plans and specifications for any extension or deletion of his designed work and checks contractor's estimates for them as submitted to the architect.
- 7. Makes detailed inspection as work nears conclusion and prepares "punch list" of incomplete items to be incorporated in the list which the architect turns over to the contractor.
- 8. Makes final inspection.
- 9. Checks contractor's submission of all guarantees, operating instructions, manuals, asbuilt drawings, etc., pertinent to his portion of the work and advises architect when contract requirements have been met.
- 10. Advises architect that engineering work he has designed and specified is satisfactorily completed.

## C. AFTER CONSTRUCTION IS COMPLETED

- 1. Assists architect in
  - a. Advising owner regarding operation and maintenance of building and equip-
  - b. Correction of any deficiencies in the work which appear.

### IV. THE CONTRACTOR'S FUNCTIONS

### A. BEFORE CONSTRUCTION BEGINS

1. Secures plans and specifications from architect, familiarizes himself with all existing conditions at the site.

(continued on page 25)

## 1966 The Year

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working hard to make electricity work harder for you.

24 EMPIRE STATE ARCHITECT - MAY-JUNE, 1966

## HOW DOES A BUILDING GET BUILT (continued from page 23)

2. Analyzes proposed project to decide:

 Most economical and effective method of applying his resources to the building project.

 Decides which portions of the work he will do with his own forces, which portion he will employ subcontractors to do.

b. Length of time it will take him to complete the project and whether this is the most profitable use of his organization during the period.

 Whether capital required for handling this project is available to him.

3. Assembles prices.

 Reissues plans and specifications to subcontractors for bids, receives and tabulates their bids.

 Prepares quantity takeoff of materials and labor to be supplied by own forces and checks market prices.

c. Estimates cost of home office and field office overhead, superintendence, watchmen, winter heat or protection of the work, purchase or rental of equipment, insurances, bonds and guarantees required by contract, travel expense, permits, licenses, etc.

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d. Estimates reasonable profit.

4. Submits sealed bid on forms required by the specifications.

a. Includes bond as guarantee that his bid will remain open for thirty days or such period as Invitation to Bid specifies.

Executes contract with owner when advised of his selection.

 May negotiate adjustment of contract scope and price upward or downward prior to signing if owner so desires.

b. Furnishes any performance guarantees required by contract.

c. Agrees to start work within a given number of days after receiving owner's order to proceed.

Prepares and submits for architect's approval:

a. List of proposed subcontractors.

b. Breakdown of subcontract prices.

c. Schedule of job progress.

d. Evidence of required insurance.

e. Arrangements for storage, office and sanitary facilities on the site.

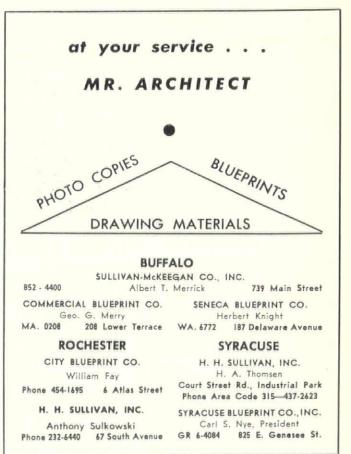
7. Executes contracts with subcontractors.

8. Secures building permits.

B. DURING CONSTRUCTION

 Commences work in accordance with schedule and states date for record.

(continued on page 27)



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Herman Nelson



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### HOW DOES A BUILDING GET BUILT? (continued from page 25)

- a. Designates job superintendent and provides him with necessary field staff. Clearly specifies the limits of the job superintendent's authority.
- b. Lays out building according to survey.
- c. Thereafter notifies architect in writing of any delays beyond his control for which he wishes to claim extension of contract time.
- d. Arranges orderly scheduling of all subcontractors' work and the coordination of all trades.
- e. Arranges for temporary utilities.
- Secures shop drawings from subcontractors and suppliers and submits them for architect's approval.
  - a. Checks drawings for conformance with contract documents, accuracy, actual dimensions in the building, coordination with other work, and approves prior to submission.
- Secures architect's approval of samples of materials, equipment and finish.
- Anticipates demand for materials, equipment and labor force and assures their availability.
- Keeps accurate record of project costs at all times.
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  - a. On accepted lump sum estimate.
  - b. On the basis of agreed upon unit prices.
  - c. On the basis of actual cost plus an agreed upon percentage.
- Makes protest to architect immediately if ordered to perform without added compensation any work which he believes is not included in his contract.
  - Architect investigates promptly and decides validity of the protest.
    - (1) Contractor may file claim, and either contractor or owner may demand arbitration if he considers architect's decision unfair.
- Accompanies architect on periodic visits of inspection and arranges joint meetings with owner, architect and subcontractors, as requested, to maintain mutual understanding and harmony of effort.
  - Immediately corrects any errors in work which the architect finds.
  - Cooperates in keeping full time Field Inspector (clerk of the works) fully advised on job progress and job problems.
  - c. Secures architect's advice on solution of existing or anticipated job problems. Airs any complaints he has regarding cooperation from architect or owner in issuing approvals or decisions.

(continued on page 33)



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## news and views

## Suing the Builders: Engineers, Architects Are Hit by Injury Suits

By Wayne E. Green

Staff Reporter of The Wall Street Journal

Excerpts from an article published in the Wall Street Journal April 19, 1966 reprinted by special permission. Architects should be alerted to these hazards of architectural practice and take steps to eliminate them.

Some time ago a woman was crippled when a section of concrete supporting an advertising sign fell on her as she walked into a supermarket in Rantoul, Ill. A state circuit court ruled that the two engineers who had designed the support back in 1958 were liable and awarded her \$250,000.

This case, now on appeal, is not an isolated thing. Increasingly, engineers, architects and construction contractors are being sued for injuries allegedly resulting from faulty workmanship in buildings. This is a marked departure from the traditional concept that only the owner is liable to injury victims for damages once a building has been occupied. One result of the trend is sharply increased costs for many builders and designers.

"This may be the single biggest problem that people in the construction-design field face right now," says J. S. Duvall, Washington, D.C., who writes liability insurance for architects and engineers. A Miami attorney who frequently defends contractors says he is handling at least 25% more such cases than three years ago.

The size of award isn't exceptional either. Mr. Duvall notes that, although a \$20,000 suit once was considered large, at least one recent award was as high as \$460,000.

The faulty workmanship cases are called "third-party liability" suits because the injury victim wasn't a signer of the contract under which the building was erected. The evolution of legal thinking in such cases has taken

more than a century and has involved a complete switch from the once prevalent view. Decisions in these cases always have been based on the theory that someone's negligence caused the injury in question. But the traditional idea — established, in effect, in an 1842 case — has been that even if a builder or designer did use negligent workmanship, his liability was somehow erased when the owner accepted the building.

This view gave ground slowly. A 1916 case established in effect that manufacturers as well as retailers can be sued by users of products, even though there is no contract between a manufacturer and a user of a product. This legal reasoning now is being extended to construction. In the past few years, the doctrine has clearly been established that builders and designers "have a legal duty to the consuming public," as Dallas attorney Mark Martin puts it.

### One View of Builders

Injury victims are rushing to take advantage of this change of legal thinking. One reason, say some authorities, is the feeling that builders and designers are rich and therefore a more promising target than a building's owner for big damage suits. "The public thinks contractors and architects are getting immensely wealthy," moans Earl Tankersley, an Oklahoma City Contractor. "The theory is that if you can gouge a contractor, he's open game." Among plaintiffs and their attorneys, of course, there also is a wide feeling that an architect or builder quite correctly should be held responsible if faulty design or construction in a building causes injury to a person.

Frequently, to try to be certain he collects from someone, the victim sues both the owner of a building and its designer or builder. This often leads, to an out-of-court settlement with the owner and then a full-scale trial — unprejudiced by the previous settlement — against the designer or builder. Thus, the victim sometimes manages to collect twice for the same injury.

The growth of third-party suits is having broad effects. For one thing, builders' and designers' legal costs are rising as they are forced to defend themselves. They also must purchase broader liability insurance to cover possible suits over defective workmanship. And mounting claims under this type of insurance are leading to higher premium rates.

"Our liability insurance premiums have tripled in the past two or three years," says Harold Flood, an Oklahoma City architect. These added costs are being borne ultimately by the new building's owner. "It really amounts to the owner paying us to pay the premium," says John S. McQuade, Jr., a Philadelphia contractor.

Although some courts are said to feel third-party suits help ultimately to clear court dockets, it also is apparent that such suits immediately can give rise to other types of suits in a kind of chain reaction. Architects, particularly, complain that since it has been established that they can be sued successfully, the suits are coming from all sides — and often with little, if any, relation to the third-party liability cases that apparently started it all.

Employes of a contractor, for example, lately have begun suing the architect for injuries received during construction — usually basing their claims on language in the contract requiring the architect to "supervise" the construction. In some states the employe can collect twice for an injury: First from the contractor he works for under workmen's compensation, and then from the architect in a civil suit for damages.

Designers complain that courts have interpreted the word "supervise" in construction contracts so broadly that they are being held responsible for any negligence occurring during construction. Previously, architects say they were expected only to make periodic visits to the construction site to fulfill their supervisory function.

In a recent case in Maroa, Ill., three employes of a building contractors sued both the architects and the school district when the roof of a gymsasium they were remodeling collapsed on them. A state court awarded the workers \$125,000 to be paid by the architects. The award was upheld by the Illinois Supreme Court.

Such cases are making architects furious. "An architect can't be out there watching every spoonful of concrete that's poured," grumbles W. H. Scheick, executive director of the American Institute of Architects.

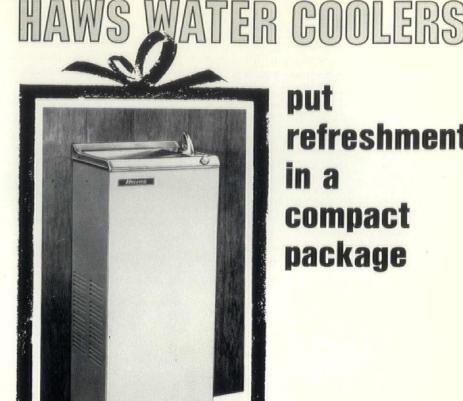
## **Bonding Companies** Are Suing Architects

Also turning on architects are the bonding companies, whose normal role is to guarantee the contractors' financial capability and performance and then take the loss if the contractor defaults. In some cases these companies are trying to recover their loss from the architect, who approves the owner's periodic payments to the contractor, on the ground that the architect should have supervised the disbursements more closely.

Robert Cerny, a Minneapolis architect, recently lost such a suit to a bonding company, and as one consequence his firm is revamping its contract forms. Mr. Cerny claims this type of suit is so unprecedented that "it makes for a whole new jungle-and no one knows where anyone is."

Contractors blame much of the chaos on architects, who normally draw up the contract and prepare job specifications - sometimes us-

(continued on next page)



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## NEWS AND VIEWS (Continued)

ing contract forms that lately have become obsolete. Contractors also complain that architects are tossing into the contracts "hidden provisions" that would make the contractor liable for everything. "They're trying to hang the contractor with what the architect forgets," says Mr. McQuade, the Philadelphia contractor.

Architects deny the charge, and claim that these "supplemental provisions" actually benefit the responsible contractors. "The provisions fix it so we can make the shyster toe the line," asserts Albert S. Ross, an Ada, Okla., architect.

## "Hold-Harmless Clauses"

Getting most of the attention are so-called hold-harmless clauses in contracts. These generally obligate the contractor to assume most of the legal responsibility. They are called hold-harmless clauses because the contractor, in effect, agrees to hold the owner and architect "harmless" from any damage suit.

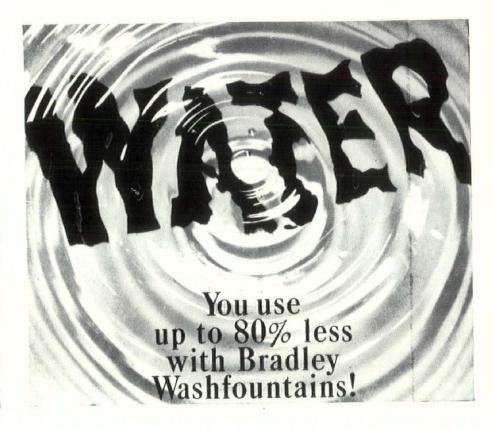
Cliff Mortensen, a Seattle contractor, fumes: "We will have mental institutions just for general contractors if we ever agree to such provisions."

Nevertheless, many lawyers say much of the contractor's plight is his own fault. They claim few ever bother to let their attorney look over the contract before signing, apparently because they're afraid the owner will take his business elsewhere.

Despite the bickering, contractors and architects are working to clear up some of their problems—particularly by concentrating on statutes of limitations, or laws which limit the time a person has to bring suit. Contractors are seeking changes in these laws, which they contend are so vague as to be open to wide interpretation. The changes they seek would pin down the time limit for legal action and get the period to begin with the time the owner takes over the building.

Builders complain that in faulty workmanship cases many courts are holding that the limitation period in the statute doesn't begin until the defect is discovered — an interpretation, it's charged, that could expose builders to an almost indefinite liability.

Even so, contractors may be better off in this regard than architects, who gripe that until recently there were no statutes of limitation applying to them. Such statutes are still considered indefinite in all but 12 states, they add.



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gress of the construction under the direction of the Department.

Under the contract the consulting firm will receive reimbursement for all direct costs at the construction site and a lump sum fee of \$1,500,000 over the term of the contract.

## Call in a Specialist When Necessary

An architect was retained to design a college dormitory. The building was to be a four-story reinforced concrete structure.

The architect retained a testing laboratory of excellent repute to make soil tests. The testing laboratory took core borings and the results were furnished to the architect. The structural design, including the plans for the foundations, were prepared by a structural engineer who was an employee of the architectural firm. The engineer was not experienced in reading and analyzing soil test reports.

As the fourth floor of the building was being poured, the contractor's superintendent observed that a portion of the building had settled approximately three-eighths of an inch in one day. When this rapid settlement was discovered, all work on the project was stopped.

Investigation indicated that the original soil tests were correct but that the architect's employee had not correctly interpreted the test results. The consequence was that the foundation design was not adequate for the soil conditions at the job site; the caissons were not deep enough to reach solid rock foundation. The recommended solution was to grout the caissons at a cost of approximately \$35,000. This remedial work was successfully carried out, but the architect was required to bear its cost since the error had been made by his staff.

### Points to Note:

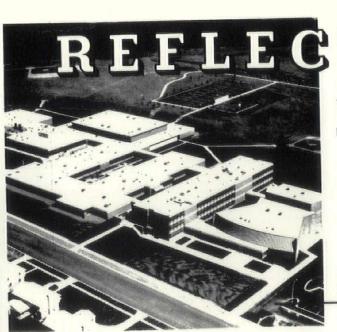
Architects should make certain that the results of tests or studies of a specialized nature are analyzed or interpreted by personnel experienced and knowledgeable in the particular field involved.

This information on professional liabilities is offered with the suggestion that architects review their practices and procedures, by The American Institute of Architects Committee on Professional Insurance, Fritz R. von Grossmann, FAIA, Chairman.

## Consultant Engaged For South Mall Supervision

Albany – New York State Superintendent of Public Works J. Burch McMorran announced March 3, 1966 that the Department has retained the George A. Fuller Company Inc., 595 Madison Avenue, New York City, under a consultant agreement to supervise the construction and inspection of the South Mall project in Albany.

Under the contract, which is to extend for a 54-month period beginning March 1, 1966, the firm will review all plans and specifications, prepare estimates for each unit of construction, coordinate the various elements of the project, develop and monitor schedules for all parts of the project, review all changes in the work performed, do the physical inspection of all work under the standards of the Department of Public Works and be responsible for the overall pro-



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## PARTNERS IN PROGRESS IN 1966, 25 YEARS LATER (continued from page 5)

Architect would need the same help. Architects will find the answers to almost all their masonry questions in this T.D. Handbook, and rapidly with the help of the index.

- 6. As our population increases, and along with it our ability to produce gadgets, and build and install equipment that can cause fires, all the individuals having to do with the construction and occupancy of buildings have become increasingly conscious of the hazard of fire. In answer to the request for better fire-rated materials, Anchor has had all its blocks tested at Underwriters' Laboratories, Inc. for 2, 3, & 4 hrs. fire ratings. They now make hollow units of a special mix with various percentages of void to meet the specific U.L. requirements for fire ratings. This fulfils the increased demand by Architects, building officials, and insurance companies for better fire rated materials.
- 7. Its always interesting and stimulating to embark on a new adventure. Anchor had one of these recently. It launched a new product, "Maryland Stone Split Blocks". The source of aggregate used to make it, a white calcite, purchased and shipped in from the state of Maryland, gave it the name. We thought it sounded traditional and respectable. Traditional it was, for the white calcite we use comes from the same Kockeyville formation of limestone from which the columns of the Capitol Building, the Washington Monument, and the famous "White Stone Steps" of Baltimore were made. Having been assured of the tradition, we hoped that the performance of these Maryland Stone properformance of this Maryland Stone product, cured in an autoclave to make a stone-like material in brick dimensions, would earn the necessary respect by its quality. It has!
- 8. New products come and go. Thoses that stay on the market obviously are those that prove practical through easy installation and good results. A new product here to stay is Silicone Treated Perlite in a granular form as

loose insulation fill and poured into the cores of concrete blocks or the wythes of masonry walls. Value added by its use, in excess of its cost, is the reason for its acceptance. A low cost insulation, with permanent efficiency, it has the added feature of low water permeability. This is often effective in preventing moisture penetration of masonry walls. It was a "natural" for Anchor to add Silicone Treated Perlite Loose Fill Insulation for masonry to its line of masonry materials.

- 9. Since the products which Anchor makes had become so many in number, we thought we should, at this point, have in print a description of all the products for the convenience of the Architect. Anchor Standards was born of this idea. Anyone interested can have one or several copies of this brochure which is invaluable as a reference for sizes and shapes of concrete blocks and other standard precast items.
- 10. Industries do great things, and people even more so. Anchor made its first concrete block on Good Friday, in March of 1936, just over 30 years ago. On Good Friday of this year, April 8th, Mr. Frederick W. Reinhold, Chairman of the Board, turned over the last of his stock holdings, representing ownership, to five of his executive employees. This was not only a magnanimous act, but "real news" and good news for the 5 lucky men. These men, Grant N. Reinhold, President, Howard Barth, Secretary-Treasurer, Elmer R. Reinhold, Vice-President, Dan L. Sutter, Vice-President, and Harvey A. Lee, Vice-President would agree that the best news was saved until last.

Anchor Concrete Products, Inc. which has grown with the Empire State Architect, pays tribute to this fine publication, and to the organization, The New York State Association of Architects, which had the foresight and initiative 25 years ago to launch this vitally important magazine.

The special day commemorating the 30th Anniversary is August 23rd, the 70th birthday of the founder of Anchor Concrete, Frederick W. Reinhold.

## NYSAA 1966 ANNUAL CONVENTION

- HOST WESTCHESTER CHAPTER A. I. A.
- PLACE . WHITEFACE INN, LAKE PLACID, NEW YORK
- TIME OCTOBER 6, 1966 TO OCTOBER 9, 1966

## LETTERS TO THE EDITOR

March 29, 1966

To the Editor:

The following comments are relative to the article entitled "The Folsom Law Revisions to the Metcalf-McClosky Act," published in the March/April issue of EMPIRE STATE ARCHITECT.

Under Heading: "Authority Vested in Board of Social Welfare". Reference in text should be to the "New York State Department of Social Welware," not public welfare."

Under Heading: "The Folsom Act of 1965". Chapter 795 does not supersede Chapter 730 but only amends it. Certain portions of Chapter 730 remain in effect.

Under Heading: "N.Y. Chapter AIA Discussion Meeting Held". Mr. Viola is currently employed by The Hospital Review and Planning Council of Southern New York. The words "Division of Review" should be deleted.

Last Paragraph: This paragraph should be clarified since the New York State Department of Health approves the construction of all hospitals and nursing homes regardless of auspices and location. The establishment of a new nursing home or hospital must be approved by the Department of Social Welfare prior to the application for the approval of construction.

Under Heading: "Substantial is defined". The determination of what will constitute "substantial" will be made by the Department of Health after the submission of a letter of intent as described in Part 710, Section 710.2. Please refer to Section 710.3; the last sentence of

the paragraph states this clearly.

Under Heading: "Other items of significance". Chapter 394 provides funds for the construction of public nursing home facilities by the counties of the State of New York and the city of New York. These facilities may be eligible for both the State funds and Hill-Harris (Hill-Burton) funds, depending upon priorities and the availability of funds. A nursing home facility on the site of a hospital is not eligible for these State funds.

There may be other items forthcoming after this article has had a more careful reading.

Very truly yours,
Irving A. Mennen, A.I.A.
Director
Bureau of Hospital
Construction Services

## HOW DOES A BUILDING GET BUILT (continued from page 27)

- Prepares and submits to the architect each month a detailed application for payments due, broken down to show amount due on each subcontract.
  - a. On approval architect issues certificate
    of payment due which contractor then
    presents to owner.
- Maintains constant superintendence and supervision of all phases of the work and at end of job sees that all items on the architect's punch list are promptly corrected.
- 11. Arranges for all tests required by the contract and submits test data to the architect. Demonstrates use of mechanical, electrical, communication, and other systems.
- Prepares or secures from subcontractors for submission to owner all;
  - a. As-built drawings.
  - b. Operating manuals for equipment.
  - c. Guarantees of equipment, materials and workmanship.
  - d. Spare parts and special tools.
  - Releases of lien as receipts in full from all subcontractors and suppliers.
  - f. Kevs.
- Makes final cleanup of the building, asks architect for certificate of completion and arranges specific date for turning building over to the owner.
- 14. If required, trains owner's personnel in building operation.
- Receives final payment and pays off subcontractors.

## C. AFTER CONSTRUCTION IS COMPLETED

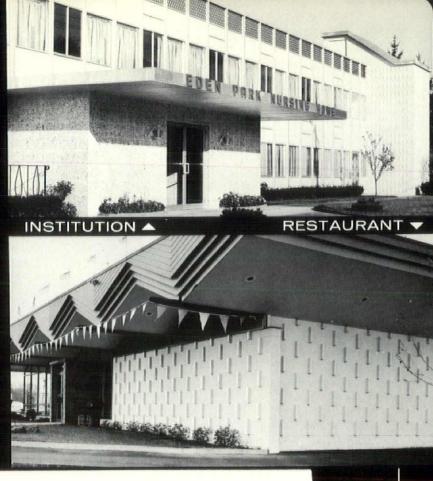
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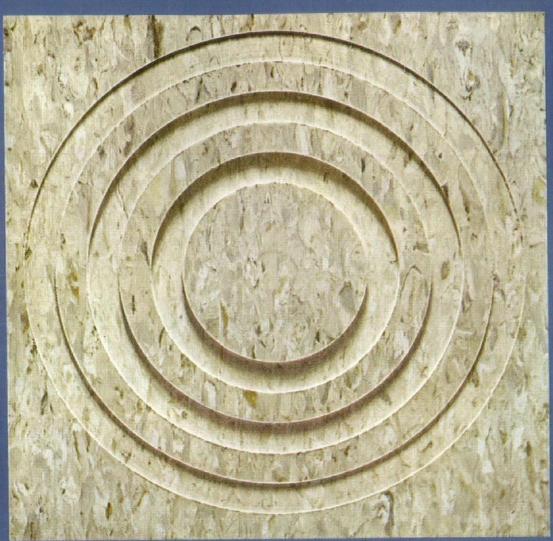
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